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1803

Three portraits inserted  
and A. L. F. Sinclair.

Sir John Sinclair presents his  
respects to the President of the United  
States of America, <sup>Washington</sup> and requests his  
acceptance of "A treat on Jurorancy,"  
in which he has endeavoured to  
explain, the most important intricacies  
to be met with, in the discussion of  
that most difficult subject.

When Sir John published his  
Correspondence with General Washington,  
he prefixed to it, a brief sketch of  
the merits of that most extraordinary  
personage, some copies of which, sepa-  
rately printed he herewith transmits.  
It has been perused, with so much  
heart-felt satisfaction, by a number of

natives of America, that Sir John  
is induced to express his wish, that  
it were taught, as an exercise at  
School. The youths of America,  
would thus be early impressed, with  
an anxious wish, to emulate the  
virtues, and to venerate the memory  
of so pre-eminent a character  
who has scarcely had a rival, either  
in Ancient or in Modern History.

Brown's Hotel.

Palace Yard Westm. London.

12 June 1821



GENERAL WASHINGTON.

*Engraved for the Encyclopedia Londinensis 1828.*

# LETTERS

FROM HIS EXCELLENCY

GEORGE WASHINGTON,

TO

ARTHUR YOUNG, ESQ. F. R. S.

AND

SIR JOHN SINCLAIR, BART. M. P.

CONTAINING

*AN ACCOUNT OF HIS HUSBANDRY,*

WITH

HIS OPINIONS ON VARIOUS QUESTIONS IN AGRICULTURE;

AND

Many Particulars of the Rural Economy

OF THE

UNITED STATES.

---

Alexandria:

PRINTED BY COTTOM AND STEWART,  
AND SOLD AT THEIR BOOKSTORES IN ALEXANDRIA AND  
FREDERICKSBURG.

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1803.

## TO THE PUBLIC.

THE circumstance which occasioned the Correspondence now printed, was an application made to me for a bailiff to send to General WASHINGTON, and the information I then received, that the General was extremely fond of Agriculture, and had been unfortunate in several people, in the line of Husbandry, that had been sent to him from England. I was hurt at hearing this, and wrote to offer him any assistance in his farming pursuits, that might be in my power. He readily accepted the offer; which produced the following Letters.

That they will prove interesting to the Public, I have little doubt; not merely from the great celebrity of the writer, but by reason of many particulars they contain, descriptive of the United States: of the authenticity and accuracy of these, there cannot be the smallest doubt; and few countries have been described in so satisfactory a manner as the Central States, in this Correspondence.

With whatever view the Letters may be read, it must be a pleasing spectacle to a reflecting mind, to see so close an attention paid to the practice of Agriculture, by men in the highest situations; who, from commanding Armies, and presiding in Senates, can descend to the humbler walk of Husbandry, and find it an employment sufficient to interest the most splendid talents; and an amusement that can animate the best affections of the heart.



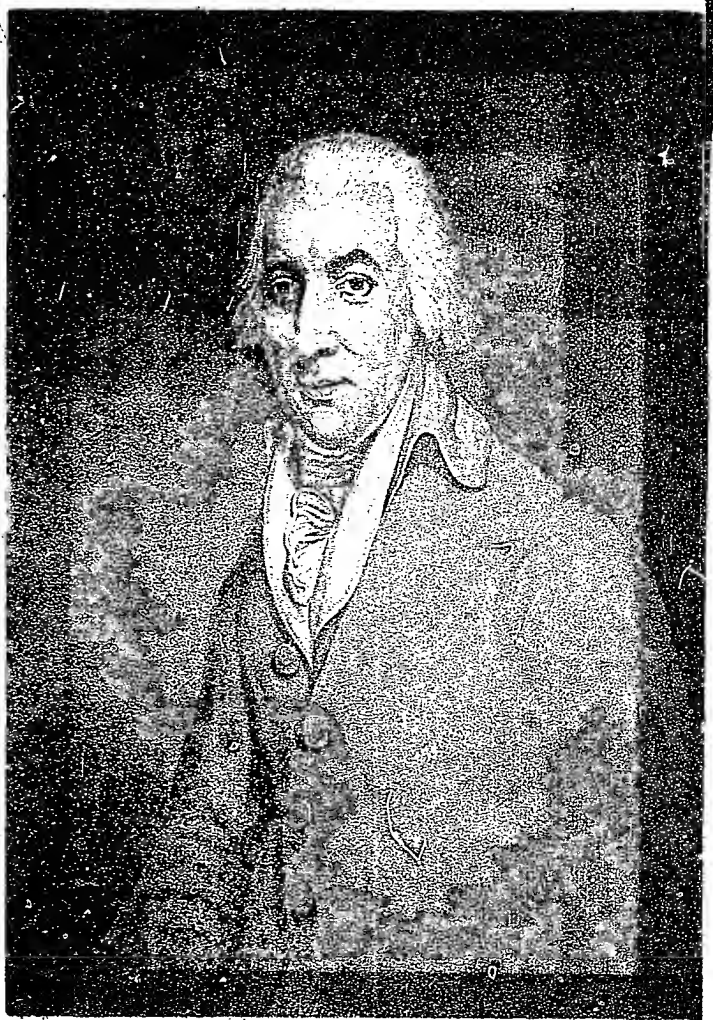
## ADVERTISEMENT.

WHEN the Editors first contemplated publishing "GENERAL WASHINGTON'S LETTERS TO SIR JOHN SINCLAIR, on *Agricultural and other interesting subjects*," it was their intention to have executed it on a fine wove paper, and in a superior stile of printing to what is now offered. But a copy of the "GENERAL'S LETTERS TO SIR ARTHUR YOUNG" on similar subjects, having since fallen into their hands, accompanied with letters of experience from gentlemen of reputed taste in farming, resident in different parts of the Union, induced them to prefer utility to elegance, and by deviating from their former proposal, have been enabled to furnish, without any additional expence, the General's correspondence with both these gentlemen where one only was promised. Should any of the Subscribers, in consequence of this deviation, think proper to withdraw their subscription, they will be at liberty so to do.



*The Great Memorial*  
 SIR JOHN SINCLAIR, BART.  
 Founder of the Board of Agriculture.

*Engraved by W<sup>m</sup> Bourne from a drawing painted by A. Robertson Esq.*



*A Rising Star!*

*W. Hinton Delin. Sculp.*

Arthur Young Esq<sup>r</sup> F.R.S.  
Secretary to the

HON<sup>BLE</sup> BOARD of AGRICULTURE

Published July 23. 1795. by J. Sewell, Cornhill.

# LETTERS

&c. &c.

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*Mount Vernon, 5th of August, 1786.*

SIR,

ARTHUR YOUNG, Esq. of Bury, in Suffolk, having been so obliging as to offer to procure for me, implements of husbandry, seeds, &c. I have accepted his kindness with much pleasure, because he is a competent judge of the first, and will be careful that the latter are good of their several kinds; a thing of much consequence, and which does not often happen with seeds imported into this country from Europe.

I have requested him to forward these articles to your care, and draw upon you for the amount. Let me entreat your particular attention to them, with a request that the captain of the vessel on board of which they are shipped, may be solicited to keep the seeds in the cabin, or out of the ship's hold, at any rate, as they never fail to heat and spoil when put there.

I am, Sir,

Your most obedient humble servant,

G. WASHINGTON.

*Wakelin Welch, Esq.*

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*Mount Vernon, 6th of August, 1786.*

SIR,

I HAVE had the honor to receive your letter of the seventh of January from Bradfield-Hall, in Suffolk,

and thank you for the favor of opening a correspondence, the advantages of which will be so much in my favor.

Agriculture has ever been amongst the most favourite amusements of my life, though I never possessed much skill in the art ; and nine years total inattention to it, has added nothing to a knowledge which is best understood from practice ; but with the means you have been so obliging as to furnish me, I shall return to it (though rather late in the day) with hope and confidence.

The system of agriculture (if the epithet of system can be applied to it,) which is in use in this part of the United States, is as unproductive to the practitioners as it is ruinous to the land-holders. Yet it is pertinaciously adhered to. To forsake it ; to pursue a course of husbandry which is altogether different and new to the gazing multitude, ever averse to novelty in matters of this sort, and much attached to their old customs, requires resolution ; and without a good practical guide, may be dangerous ; because, of the many volumes which have been written on this subject, few of them are founded on experimental knowledge—are verbose, contradictory, and bewildering. Your annals shall be this guide. The plan on which they are published, gives them a reputation which inspires confidence ; and for the favor of sending them to me, I pray you to accept my very best acknowledgments. To continue them, will add much to the obligation.

To evince with what avidity, and with how little reserve, I embrace the polite and friendly offer you have made me, of supplying me with “ Men, cattle, tools, seeds, or any thing else that may add to my rural amusement,” I will give you, Sir, the trouble of providing, and sending to the care of WAKELIN WELCH, Esq. of London, merchant, the following articles :

Two of the simplest and best-constructed ploughs for land which is neither very heavy nor sandy. To be drawn by two horses—to have spare shares and colters—and a mould on which to form new irons when the old ones are worn out, or will require repairing.

I shall take the liberty in this place to observe, that some years ago, from a description, or recommendation of what was then called the Rotherham, or patent plough, I sent to England for one of them ; and till it began to wear, and was ruined by a bungling country smith, that

no plough could have done better work, or appeared to have gone easier with two horses ; but for want of a mould (which I had neglected to order with the plough,) it became useless after the irons which came in with it were much worn.

A little of the best kind of cabbage-seeds, for field culture.

Twenty pounds of the best turnip-seeds, for ditto.

Ten bushels of sainfoin-seeds.

Eight bushels of the winter vetches.

Two bushels of rye-grass seeds.

Fifty pounds of hop clover-seeds.

And, if it is decided (for much has been said for and against it,) that burnet, as an early food, is valuable, I should be glad of a bushel of this seed also. Red clover-seeds are to be had on easy terms in this country, but if there are any other kinds of grass-seeds (not included in the above,) that you may think valuable, especially for early feeding or cutting, you would oblige me by adding a small quantity of the seeds, to put me in stock. Early grasses, unless a species can be found that will stand a hot sun, and oftentimes severe draughts in the summer months, without much expence of cultivation, would suit our climate best.

You see, Sir, that without ceremony, I avail myself of your kind offer ; but if you should find in the course of our correspondence, that I am likely to become troublesome, you can easily check me. Inclosed I give you an order on WAKELIN WELCH, Esq. for the cost of such things as you may have the goodness to send me. I do not at this time ask for any other implements of husbandry than the ploughs ; but when I have read your Annals (for they are but just come to hand) I may request more. In the meanwhile, permit me to ask what a good ploughman might be had for : annual wages, to be found (being a single man) in board, washing, and lodging ? The writers upon husbandry estimates the hire of labourers so differently in England, that it is not easy to discover from them, whether one of the class I am speaking of would cost eight or eighteen pounds a year. A good ploughman at low wages, would come very opportunely with the ploughs here requested.

By means of the application I made to my friend Mr. FAIRFAX, of Bath, and through the medium of Mr. RACK, a bailiff is sent to me, who, if he is acquainted with the best courses of cropping, will answer my purposes as a director or superintendant of my farms. He has the appearance of a plain honest farmer ;—is industrious ;—and from the character given of him by a Mr. PEACY (with whom he has lived many years) has understanding in the management of stock, and of most matters for which he is employed. How far his abilities may be equal to a pretty extensive concern, is questionable. And what is still worse, he has come over with improper ideas ; for instead of preparing his mind to meet a ruinous course of cropping, exhausted lands, and numberless inconveniences into which we had been thrown by an eight years war, he seems to have expected that he was coming to well organized farms, and that he was to have met ploughs, harrows, and all the other implements of husbandry, in as high taste as the best farming counties in England could have exhibited them. How far his fortitude will enable him to encounter these disappointments, or his patience and perseverance will carry him towards the work of reformation, remains to be decided.

With great esteem, I have the honor to be,

Sir, your most obedient humble servant,

G. WASHINGTON.

*Arthur Young, Esq.*

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*Mount Vernon, 15th of November, 1786.*

SIR,

THE inclosed is a duplicate of the letter I had the honor of writing to you the 6th of August.

The evil genius of the vessel by which it was sent (which had detained her many weeks in this country, after the letters intended to go by her were ready, agreeably to the owner's appointment,) pursued her to sea, and obliged the captain (when many days out,) by the leaky condition in which she appeared, to return to an American port. The uncertainty of his conduct with respect to the

letters, is the apology I offer for giving you the trouble of the inclosed.

Since the date of it, I have had much satisfaction in perusing the Annals of Agriculture, which you did me the honor to send me. If the testimony of my approbation, Sir, of your disinterested conduct and perseverance, in publishing so useful and beneficial a work (than which nothing, in my opinion, can be more conducive to the welfare of your country,) will add aught to the satisfaction you must feel from the conscious discharge of this interesting duty to it, I give it with equal willingness and sincerity.

In addition to the articles which my last requested the favor of you to procure me, I pray you to have the goodness of forwarding what follows :

Eight bushels of what you call velvet\* wheat, of which I perceive you are an admirer.

Four bushels of beans, of the kind you most approve for the purposes of a farm.

Eight bushels of the best kind of spring barley.

Eight bushels of the best kind of oats.

And eight bushels of sainfoin seed. All to be in good sacks.

My soil will come under the description of loam ; with a hard clay, or (if it had as much of the properties as the appearance might be denominated) marl, from eighteen inches to three feet below the surface. The heaviest soil I have, would hardly be called a stiff or binding clay in England ; and none of it is a blowing sand. The sort which approaches nearest the former, is a light grey ; and that to the latter, of a yellow red. In a word, the staple has been good ; but by use and abuse, it is brought into bad condition.

I have added this information, Sir, that you may be better able to decide on the kind of seed most proper for my farm.

Permit me to ask one thing more. It is to favor me with your opinion, and a plan of the most complete and useful farm-yard, for farms of about 500 acres. In this I

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\* *The books being at a bookbinder's, I may have miscalled this wheat.*



mean to comprehend the barn, and every appurtenance which ought to be annexed to the yard. The simplest and most economical plan would be preferred, provided the requisites are all included. Mr. WELCH will answer your draft for the cost of these articles, as before. He is advised of it.

I have the honor to be, Sir,

Your most obedient and most humble servant,

G. WASHINGTON.

*Arthur Young, Esq.*

*Mount Vernon, November 1, 1787.*

SIR,

YOUR favor of the first of February came to hand about the middle of May last. An absence of more than four months from home, will be the best apology I can make for my silence till this time.

The grain, grass-seeds, ploughs, &c. arrived at the same time, agreeable to the list; but some of the former were injured (as will always be the case) by being put into the hold of the vessel; however, upon the whole, they were in much better order than those things are generally found to be, when brought across the Atlantic.

I am at a loss, Sir, how to express the sense which I have of your particular attention to my commissions, and the very obliging manner in which you offer me your services in any matters relating to agriculture, that I may have to transact in England. If my warmest thanks will in any measure compensate for these favors, I must beg you to accept of them. I shall always be exceedingly happy to hear from you, and shall very readily and cheerfully give you any information relative to the state of agriculture in this country, that I am able.

I did myself the honor to hand the set of Annals to the Agriculture Society in Philadelphia, which you sent to that body, through me. The president wrote a letter to you, expressive of the sense they entertained of the favor which you did them; and mentioned therein, the effects of some experiments which had been made with plaster of Paris, as a manure: I intended to have given you an

account of it myself, as I find the subject is touched upon in your Annals, but this letter has precluded the necessity of it.

The fifth volume of the Annals, which was committed to the care of Mr. ATHAWES for me, did not come to hand till some time after I had received the sixth.

The quantity of sainfoin which you sent me, was fully sufficient to answer my purpose; I have sown part of it, but find that it comes up very thin; which is likewise the case with the winter wheat, and some other seeds which I have sown.

I have a high opinion of beans, as a preparation for wheat and shall enter as largely upon the cultivation of them next year, as the quantity of seed I can procure, will admit.

I am very glad that you did not engage a ploughman for me at the high wages which you mention, for I agree with you, that that single circumstance, exclusive of the others which you enumerate, is sufficiently objectionable. I have tried the ploughs which you sent me, and find that they answer the description which you gave me of them; this is contrary to the opinion of almost every one who saw them before they were used; for it was thought their great weight would be an insuperable objection to their being drawn by two horses.

I am now preparing materials to build a barn precisely agreeable to your plan, which I think an excellent one\*. Before I undertake to give the information you request, respecting the arrangements of farms in this neighbourhood, &c. I must observe that there is, perhaps, scarcely any part of America, where farming has been less attended to than in this State. The cultivation of tobacco has been almost the sole object with men of landed property, and consequently a regular course of crops have never been in view. The general custom has been, first to raise a crop of Indian corn (maize) which, according to the mode of cultivation, is a good preparation for wheat; then a crop of wheat; after which the ground is respited (except from weeds, and every trash that can contribute to its foulness)

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\* The plan of this barn is engraved. See Annals, vol. xvi. p. 149.

for about eighteen months ; and so on, alternately, without any dressing, till the land is exhausted ; when it is turned out, without being sown with grass-seeds, or reeds, or any method taken to restore it ; and another piece is ruined in the same manner. No more cattle is raised than can be supported by lowland meadows, swamps &c. and the tops and blades of Indian corn ; as very few persons have attended to sowing grasses, and connecting cattle with their crops. The Indian corn is the chief support of the labourers and horses. Our lands, as I mentioned in my first letter to you, were originally very good ; but use, and abuse, have made them quite otherwise.

The above is the mode of cultivation which has been generally pursued here, but the system of husbandry which has been found so beneficial in England, and which must be greatly promoted by your valuable Annals, is now gaining ground. There are several (among which I may class myself), who are endeavouring to get into your regular and systematic course of cropping, as fast as the nature of the business will admit ; so that I hope in the course of a few years, we shall make a more respectable figure as farmers, than we have hitherto done.

I will, agreeable to your desire, give you the prices of our products as nearly as I am able ; but you will readily conceive from the foregoing account, that they cannot be given with any precision. Wheat, for the four last years, will average about 4s. sterling per bushel, of eight gallons. Rye about 2s. 4d.—Oats 1s. 6d.—Beans, pease, &c. have not been sold in any quantities.—Barley is not made here, from a prevailing opinion that the climate is not adapted to it ; I however, in opposition to prejudice, sowed about 50 bushels last spring, and found that it yielded a proportionate quantity with any other kind of grain which I sowed ; I might add, more. Cows may be bought at about 3l. sterling, per head. Cattle for the slaughter vary from 2d 1-4th, to 4d 1-2, sterling. per lb. the former being the current price in summer ; the latter in the winter or spring. Sheep at 12s. sterling, per head ; and wool at about 1s. sterling, per lb. I am not able to give you the price of labour, as the land is cultivated here wholly by slaves, and the price of labour in the towns is fluctuating, and governed altogether by circumstances.

Give me leave to repeat my thanks for your attention to me, and your polite offer to execute any business relating to husbandry, which I may have in England ; and to assure you that I shall not fail to apply to you for whatever I may have occasion for in that line.

I am, Sir, with very great esteem,

Your most obedient humble servant,

G. WASHINGTON.

*P. S.* I observe in the sixth volume of your *Annals*, there is a plate and description of Mr. WINLAW'S mill, for separating the grain from the heads of corn. Its utility or inutility has, undoubtedly, been reduced to a certainty before this time ; if it possesses all the properties and advantages mentioned in the description, and you can from your own knowledge, or such information as you *entirely* rely on, recommend it as a useful machine, where labourers are scarce, I should be much obliged to you to procure one for me, to be paid for and forwarded by Mr. WELCH provided it is so simple in its construction, as to be worked by ignorant persons, without danger of being spoiled (for such only will manage it here,) and the price of it does not exceed 15*l.* as mentioned in the *Annals*, or thereabouts.

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*Mount Vernon, December 4, 1788.*

SIR,

I HAVE been favoured with the receipt of your letter dated the first day of July ; and have to express my thanks for the three additional volumes of the *Annals*, which have also come safely to hand.

The more I am acquainted with agricultural affairs, the better I am pleased with them ; insomuch, that I can nowhere find so great satisfaction as in those innocent and useful pursuits. In indulging these feelings, I am led to reflect how much more delightful to an undebauched mind is the task of making improvements on the earth, than all the vain glory which can be acquired from ravaging it, by

the most uninterrupted career of conquests\*. The design of this observation, is only to shew how much, as a member of human society, I feel myself obliged, by your labours to render respectable and advantageous, an employment which is more congenial to the natural dispositions of mankind than any other.

I am also much indebted to you, for the inquiries you were so kind as to make respecting the threshing machines. Notwithstanding I am pretty well convinced from your account, that the new-invented Scotch machine is of superior merit to WINLAW's ; yet I think to wait a little longer before I procure one. In the intermediate time, I am not insensible to your obliging offers of executing this, or any other commission for me ; and shall take the liberty to avail myself of them as occasions may require.

I would willingly have sent you a lock of the wool of my sheep, agreeably to your desire, but it is all wrought into cloth, and I must therefore defer it until after the next shearing. You may expect it by some future conveyance. A manufacturer from Leeds, who was lately here, judges it to be of about the same quality with the English wool in general—though there is always a great difference in the fineness of different parts of the same fleece. I cannot help thinking that increasing and improving our breed of sheep, would be one of the most profitable speculations we could undertake ; especially in this part of the continent, where we have so little winter, that they require either no dry fodder, or next to none ; and where we are sufficiently distant from the frontiers, not to be troubled with wolves or other wild vermin, which prevent the inhabitants there from keeping flocks. Though we do not feed our sheep upon leaves, as you mention they do in some parts of France, yet we cannot want for pastures enough suitable for them. I am at a loss, therefore, to account for the disproportion between their value and that of black cattle ; as well as for our not augmenting the number. So persuaded am I of the practicability and advantage of it, that I have raised near 200 lambs upon my farm this year. I am glad to find that you are likely to succeed in propagating the Spanish breed of Sheep in Eng-

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\* *A noble sentiment, which does honour to the heart of this truly great man.—A. Y.*

land, and that the wool does not degenerate : for the multiplication of useful animals is a common blessing to mankind. I have a prospect of introducing into this country a very excellent race of animals also, by means of the liberality of the KING of Spain. One of the jacks which he was pleased to present to me (the other perished at sea) is about 15 hands high, his body and limbs very large in proportion to his height ; and the mules which I have had from him, appear to be extremely well formed for service. I have likewise a jack and two jennetts from Malta, of a very good size, which the Marquis de la FAYETTE sent to me. The Spanish jack seems calculated to breed for heavy slow draught ; and the others for the saddle, or lighter carriages. From these, altogether, I hope to secure a race of extraordinary goodness, which will stock the country. Their longevity and cheap keeping will be circumstances much in their favour. I am convinced from the little experiments I have made with the ordinary mules, (which perform as much labour, with vastly less feeding than horses,) that those of a superior quality will be the best cattle we can employ for the harness ; and indeed in a few years, I intend to drive no other in my carriage, having appropriated for the sole purpose of breeding them, upwards of twenty of my best mares.

Since I wrote to you formerly, respecting the objection made by my labourers to the weight of my ploughs, I have had sufficient experience to overcome the ill-founded prejudice, and find them answer the purpose exceedingly well. I have been laying out my farm into fields of nearly the same dimensions, and assigning crops to each until the year 1795. The building of a brick barn has occupied much of my attention this summer. It is constructed according to the plan you had the goodness to send me ; but with some additions. It is now, I believe, the largest and most convenient one in this country. Our seasons in this country (or at least in this part of it) have been so much in the two opposite extremes of dry and wet, for the two summers past, that many of my experiments have failed to give a satisfactory result, or I would have done myself the pleasure of transmitting it to you. In the first part of the last summer, the rains prevailed beyond what has been known in the memory of man ; yet the crops in most parts of the United States are good. They were

much injured, however, in those places on my farm, where the soil is mixed with clay, and so stiff as to be liable to retain the moisture. I planted a large quantity of potatoes, of which only those that were put in as late as the end of June, have produced tolerable well. I am notwithstanding, more and more convinced of the prodigious usefulness of this root, and that it is very little, if any thing of an exhauster. I have a high opinion also of carrots. The same unfavourableness of the season, has rendered it unimportant to give a detail of my experiments this year in flax, though I had sowed 25 bushels of the seed. In some spots it has yielded well; in others very indifferently, much injured by weeds and lodgits.

As to what you suggest at the close of your letter, respecting the publication of extracts from my correspondence, in your *Annals*, I hardly know what to say. I certainly highly approve the judicious execution of your well-conceived project of throwing light on a subject, which may be more conducive than almost any other to the happiness of mankind. On the one hand, it seems scarcely generous or proper, that any farmer, who receives benefit from the facts contained in such publications, should withhold his mite of information from the general stock. On the other hand, I am afraid it might be imputed to me as a piece of ostentation, if my name should appear in the work. And surely it would not be discreet for me to run the hazard of incurring this imputation, unless some good might probably result to society, as some kind of compensation for it. Of this I am not a judge—I can only say for myself, that I have endeavoured, in a state of tranquil retirement, to keep myself as much from the eye of the world as I possibly could. I have studiously avoided, as much as was in my power, to give any cause for ill-natured or impertinent comments on my conduct: and I should be very unhappy to have any thing done on my behalf (however distant in itself from impropriety,) which should give occasion for one officious tongue to use my name with indelicacy. For I wish most devoutly to glide silently and unnoticed through the remainder of life. This is my heart-felt wish; and these are my undisguised feelings. After having submitted them confidentially to you, I have such a reliance upon your prudence, as to leave it with you to do what

you think, upon a full consideration of the matter, shall be wisest and best\*. I am, with very great regard and esteem, Sir,

Your most obedient and obliged humble servant,

G. WASHINGTON.

*Arthur Young, Esq.*

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*New-York, August 15, 1789.*

SIR,

RECOLLECTING that in one of your letters to me, you had requested me to send you a sample of the wool produced by my sheep, I directed that a fleece of a middling size and quality should be sent to me at this place; which has been done; and I now transmit it to you by the British packet, directed to the care of Messrs. WAKELIN WELCH and Son, in London.

I am, Sir,

Your most obedient servant,

G. WASHINGTON.

*Arthur Young, Esq.*

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*Philadelphia, August 15, 1791.*

SIR,

THAT I may not be thought inattentive to your favor of the 25th of January, which came to my hands about

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\* *Whatever doubts might have been entertained of the extent of this permission at that time, and of the propriety of printing any part of General WASHINGTON's letters then; at present, I conceive the above passage is a very fair justification of my presenting the public with these valuable letters.—A. Y.*



ten days ago only, I avail myself of the first packet since the receipt of it, to inform you that the Annals, and Chicorium intibus, have got safe to my hands. A set of the former I have presented, in your name, agreeably to your request, to the Agricultural Society in this city. For the other set ; for the seeds ;—and for the manufactured wool from the fleece I sent you, I pray you to accept my best thanks.

With astonishment hardly to be conceived, I read in No. 86 of your Annals, the account of the taxes with which you are burthened. Had the account come from dubitable authority, the reality of such a tax would not only have been questioned, but *absolutely* disbelieved ; for I can assure you, Sir, that there is nothing in this country that has the semblance of it. I do not, however, mean to dwell on this, or any other part of your letter at this time : the purpose of my writing to you now, is to acknowledge the receipt of the things you had the goodness to send me ; and to assure you, that with great pleasure I will forward, in a short time, such information with respect to the prices of lands, stock, grain, amount of taxes, &c. &c. as will enable you to form a pretty accurate idea of the present state, and future prospects, of this country.

In the mean while, I believe I may confidently add, that although our agriculture, manufactures, and commerce, are progressing ;—although our taxes are light ;—although our laws are in a fair way of being administered well, and our liberties and properties secured on a solid basis, by the general government having acquired more and more consistency, strength, and respectability as it moves on ; yet that no material change in the prices of the above articles has taken place, except in a few instances of land under peculiar advantages ; nor is it probable there will be in the latter, whilst there is such an immense territory back of us, for the people to resort to. In a word, Sir, when you come to receive full answers to your several inquires, I am inclined to believe that you will not be unfavourably impressed, or think an establishment in the United States, ineligible to those whose views are extended beyond the limits of their own country.

Having closed my correspondence with WAKELIN WELCH, Esq. and Son, I have to request that your communications to me, in future, may pass through the hands

of Mr. JOHNSON, Consul for the United States in London. With best wishes, and sentiments of much esteem,

I am, Sir,

Your most obedient and very humble servant,

G. WASHINGTON.

*Arthur Young, Esq.*

*Philadelphia, December 5, 1791.*

SIR,

IN a letter which I addressed to you on the 15th of August, acknowledging the receipt of your favor dated the 25th of January preceding, I promised to answer the queries contained in it, in detail. Accordingly I took measures for that purpose, by writing to some of the most intelligent farmers in the State of New-York, New-Jersey, Pennsylvania, Maryland, and Virginia; as you will perceive by the circular letter herewith enclosed: and have obtained the answers from the three last-mentioned States\*, that are thereunto annexed. I did not extend my inquiries to the northward of New-York, nor to the southward of Virginia; because in neither extremity of the Union, in my opinion, is the climate, soil, or other circumstances, well adapted to the pursuits of a mere farmer, or congenial to the growth of the smaller grains.

I have delayed the information I am about to give you, in expectation of receiving answers which have been promised me from the States of New-York and New-Jersey; but as they are not yet arrived, and a vessel is on the point of sailing for London, I shall put this packet under cover to JOSHUA JOHNSON, Esq. our Consul at that port; with a request to him, that it may be forwarded to you by a safe conveyance. The others shall follow as opportunities may present; it being my wish to give you a comprehensive view of the different parts of this coun-

\* See the paper alluded to, at the end of this letter.

try : although I have no hesitation in giving it at the same time as my opinion, that if I had a new establishment to make in it, it would be, under the knowledge I entertain of it at present (and I have visited all parts, from New-Hampshire to Georgia inclusively), in one of the three States of which you are furnished with particular accounts. New-York and New-Jersey do not differ much in soil or climate, from the northern parts of Pennsylvania. Both are pleasant, and both are well improved, particularly the first. But the country beyond these, to the eastward (and the farther you advance that way, it is still more so), is unfriendly to wheat, which is subject to a blight or mildew, and of late years, to a fly, which has almost discouraged the growth of it. The lands, however, in the New-England States, are strong and productive of other crops ;—are well improved ;—populously seated ;—and as pleasant as it can be in a country fast locked in snow several months in the year.

To the southward of Virginia, the climate is not well adapted to wheat ; and less and less so as you penetrate the warmer latitudes ;—nor is the country so thickly settled, or well cultivated. In a word, as I have already intimated, was I to commence my career of life anew, I should not seek a residence north of Pennsylvania, or south of Virginia : nor (but this I desire may be received with great caution, for I may, without knowing I am so, be biassed in favour of the river on which I live), should I go more than 25 miles from the margin of the Potowmac. In less than half that distance, in some places, I might seat myself either in Pennsylvania, Maryland, or Virginia, as local circumstances might prompt me.

Having said thus much, some of the reasons which lead to this opinion, may be expected in support of it.

Potowmac river, then, is the centre of the Union. It is between the extremes of heat and cold. It is not so far to the south, as to be unfriendly to grass ; nor so far north as to have the produce of the summer consumed in the length, and severity of the winter. It waters the soil, and runs in that climate, which is most congenial to English grains, and most agreeable to the cultivation of them. It is the river, more than any other, in my opinion, which must, in the natural progress of things, connect by its inland navigation (now nearly completed 190

measured miles up to Fort Cumberland, at the expence of 50,000*l.* sterling, raised by private subscription), the Atlantic States with the vast region which is populating (beyond all conception) to the westward of it. It is designated by law for the seat of the empire; and must from its extensive course through a rich and populous country, become in time the grand emporium of North America. To these reasons may be added, that the lands within, and surrounding the district of Columbia, are as high, as dry, and as healthy as any in the United States; and that those above them, in the counties of Berkeley, in Virginia; Washington, in Maryland; and Franklin, in Pennsylvania (adjoining each other), at the distance of from 60 to 100 miles from Columbia, are inferior in their natural state, to none in America. The general map of North America, which is herewith inclosed, will shew the situation of this district of the United States; and on EVANS's map of the middle colonies, which is on a larger scale, I have marked the district of Columbia with double red lines; and the counties adjacent to, and above it, of which particular mention has been made, with single red lines. The last-mentioned map shews the proximity of the Potowmac (which is laid down from actual survey) to the western waters; and it is worthy of observation, that the Shenandoah, in an extent of 150 miles from its confluence, through the richest tract of land in the State of Virginia, may (as is supposed) be made navigable for less than 2000*l.* The south branch of Potowmac (100 miles higher up, and) for 100 miles of its extent, may be made navigable for a much less sum. And the intermediate waters on the Virginia side in that proportion, according to their magnitude. On the Maryland side (the river Potowmac, to the head of the north branch, being the boundary between the two States), the Monocacy and Conogechep, are capable of improvement to a degree which will be convenient and beneficial to the inhabitants of that State, and to parts of Pennsylvania.

The local, or State taxes, are enumerated in the answers to the circular letter; and these, from the nature of the government, will probably decrease. The taxes of the general government will be found in the revenue laws, which are contained in the volume that accompanies

this letter. "The Pennsylvania Mercury, and Philadelphia Price Current," are sent, that you may see what is, and has been, the prices of the several enumerated articles which have been bought and sold in this market at different periods; within the last twelve months.

An English farmer must entertain a contemptible opinion of our husbandry, or a horrid idea of our lands, when he shall be informed that not more than eight or 10 bushels of wheat is the yield of an acre; but this low produce may be ascribed, and principally too, to a cause which I do not find touched by either of the gentlemen whose letters are sent to you, namely, that the aim of the farmers in this country (if they can be called farmers) is, not to make the most they can from the land, which is, or has been cheap, but the most of the labour, which is dear\*; the consequence of which has been, much ground has been *scratched* over and none cultivated or improved as it ought to have been: whereas a farmer in England, where land is dear, and labour cheap, finds it his interest to improve and cultivate highly, that he may reap large crops from a small quantity of ground. That the last is the true, and the first an erroneous policy, I will readily grant; but it requires time to conquer bad habits, and hardly any thing short of necessity is able to accomplish it. That necessity is approaching by pretty rapid strides.

If from these communications you shall derive information or amusement, it will be but a small return for the favors I have received from you; and I shall feel happy in having had it in my power to render them. As they result from your letter of the 25th of January, and are intended for your private satisfaction, it is not my wish that they should be promulgated as coming from me.

With very great esteem, I am, Sir,  
Your most obedient and very humble servant,  
G. WASHINGTON.

*Arthur Young, Esq.*

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\* *A very pointed observation, and clearly explanatory.—*  
A. Y.

The following circular letter was addressed to several gentlemen, the best informed of the agriculture, value of lands, and the prices of produce, &c. in the States of New-York, New-Jersey, Pennsylvania, Maryland, and Virginia; and the answers which have been received are thereunto subjoined.

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*Philadelphia, August 25, 1791.*

DEAR SIR,

SOME inquires having been made of me by important characters, on the state of agriculture in America, comprehending its several relations, and intended to ascertain the value of our lands, with their yield in the several kinds of grain, grass, &c. the prices of farming stock; the prices of produce, &c. together with a list of the taxes in the different States; which may in any way affect the farmer: as an object highly interesting to our country, I have determined to render the most just and satisfactory answers that the best information I can obtain from different parts of the United States will enable me to give.

With this view, my confidence in your disposition and knowledge, leads me to offer to your inquiry, and to request from your intelligence, as early information as may be convenient, on the following heads:

1. The fee-simple prices of farming lands in such part of the State of \_\_\_\_\_ as are neither so near to large towns as to enhance their value, nor so distant from market as greatly to reduce it, or to make the situation inconvenient. In your answer to this inquiry, be pleased to note, generally, the situations, the soil, and, if it be practicable, the proportions of arable, pasture, and wood-land.

2. The rents of the same lands, when leased, and, generally, the terms of lease.

3. The average product of the same lands in wheat, rye, barley, oats, buck-wheat, beans, pease, potatoes, turnips, grasses, hemp, flax, &c. in the common mode of husbandry now practised.

4. The average prices of these articles, when sold at the farm, or carried to the nearest market.

5. The average prices of good working horses, working oxen, milch cows, sheep, hogs, poultry, &c.

6. The average price of beef, veal, mutton, pork, butter, and cheese, in the neighbourhood, or at the nearest market towns.

7. The price of wrought iron, whence the price of farming utensils may be inferred.

8. A list of the taxes laid in the State of———

The tendency of this inquiry, will be my apology for the trouble it may give to you.

I am, dear Sir, with great regard,

Your most obedient servant,

(Signed) G. WASHINGTON.

#### ANSWERS\* TO THE PRECEDING LETTER.

*York-Town, Pennsylvania, Sept. 24, 1791.*

SIR,

I CONSIDERED myself as highly honored by your favor of the 25th ult. and have taken all the pains in my power to give you the satisfaction you wish for. Being soon obliged to leave home for several weeks, I am somewhat pressed in time, but thought proper to write you the result of my inquiries and observations at this period, as I am sure you will be ready to make allowance for time, and other circumstances.

I cannot boast of elegance of style, but shall study to give you my ideas, founded as well upon the information I have received from others, as my own experience; and if any of my communications prove acceptable, or useful

*\* I may observe once for all, that these accounts, procured by the person of all others whose requests would be most carefully complied with, and coming from those who would unquestionably be chosen with singular propriety, must necessarily carry a degree of authority with them, unattainable by other means.—A. Y.*

to you, I shall esteem myself highly rewarded. You were pleased to direct my inquiries chiefly towards York and Franklin counties, in this State; I have accordingly done so, and beg leave, in order to be better understood in my answers, to divide York county into three districts, and to call Franklin county the fourth district.

**First District.**—York Valley, beginning at the Susquehanna, at Wright's Ferry, and running through York country, including York Town, M'Allister's Town (alias Hanover), and Petersburg (alias Littlestown), to the Maryland line, near the latter place. In length about 39 miles, in breadth from three to four miles.

**Second District.**—The lands lying on the right of that valley, adjoining the same, and bounded by the river Susquehanna, the South Mountain, and the Maryland line.

**Third District.**—The barrens of York, including the lands on the south of York Valley, to the Maryland line.

**Fourth District.**—Franklin county.

**Answer to query the first.**—The fee-simple price of farming lands in the first district, may be averaged at 6l. 15s. per acre\*, (the dollar at 7s. 6d.) York Town lies 56 miles from Baltimore, 45 from Rock-run, 55 from Christiana-bridge, and 89 miles from the Philadelphia market†. M'Allister's Town is 18 miles from York, and 45 from Baltimore. Petersburg is seven miles from M'Allister's, and 48 from Baltimore.

The soil of this valley is of the lime-stone kind, and is rather of a rich quality when fresh; it is generally covered with a black mould. Some spots, however, are inclined to gravel or slate, from the intrusion of a few small hills. The proportion of meadow ground to arable

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\* *Arable lands near the Susquehanna will sell from 12l. to 20l. an acre, and are very productive. Some fields have furnished to the grower a clear profit of 4l. a year for three years following—cash-price for the arable lands of farms in the neighbourhood of York 10l. an acre, and they will demand the same price at M'Allister's Town.*

† *And 103 miles from the new city on the river Potomac, intended for the permanent residence of the government of the United States.*



land, may be as one to twelve ; more than one half of the arable land is, generally, in grass for pasture, sown every third year with red clover, or Timothy seed. The settlements have been so rapid in this district since the year 1740, and the plantations are so close, as not to leave more than a fourth of wood. The farms appear nearly all accommodated with running springs. The inhabitants are mostly industrious and careful. They are advancing by a steady pace, and do not seem inclined to make many innovations upon the ancient practice of agriculture. Indeed they are already strong in property ; their buildings, stock, and cattle, all shew it. The timber, locust, walnut, wild-cherry, hickory, black oak, white oak, &c.

In the Second District, the fee-simple price of farming land may be averaged at 3l. and 10s. the acre. The soil is generally of a reddish colour, sometimes mixed with sand. We call it sandstone land through the greater part of the district\*. The state of agriculture there, is not so flourishing as in the first district, though the country is thickly settled; and you find plantations amongst the highest hills. The proportion of meadow to arable land may be somewhat greater than in the first district. The lands in many places naturally inclined to grass ; the farmers here are not so careful of sowing grass-seed in their fields as those in the first district. The timber, walnut, black oak, white oak, poplar chesnut, &c.

Third District.—This district is in general badly timbered, and the soil poor, of the gravelly or slate kind, and of a reddish cast, often mixed with sand ; notwithstanding these disadvantages, more than half the barrens is under cultivation—the wood composed of dwarf white oak, chesnut, &c. The price per acre may be estimated

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\* *I have said the land is in general of the sand-stone kind, but there are two large bodies at the foot of the South Mountain, held by the Messrs. Carrolls, called Carrollsburg, and Carrolls-delight, under Maryland grants, but now within the limits of Pennsylvania. They are of the limestone quality, and so excellent, that the arable lands would sell as high as those in the neighbourhood of M<sup>r</sup> Allister's Town. Several other farms in this district would sell from 6l. to 10l. an acre.*

(35) thirty-five shillings\*. What is a little remarkable, the inhabitants of this district have paid their taxes with more punctuality than most other parts of the State. Meadow land as to arable, may be as one to fifteen; pasture grounds little attended to. Before I proceed to Franklin, I would observe that the great South Mountain (or blue ridge, as it is called in Virginia) divides York from Franklin county, and is from 7 to 10 miles in breadth; a very small proportion of it can be cultivated.

Fourth District.—Franklin is a compact county, including Cumberland Valley, between the south and north mountains for upwards of 25 miles, and part of the rich settlement of Connocheague and Antitem—few situations in America can claim a superior soil—it is nearly all lime-stone land. The quantity of meadow as to arable land, may be counted in the same proportion as in the first district of York county—about one half of the improvable land is cleared. The residue abounds in the largest locust, walnut, hickory, and oaks. The county town is Chambersburg, distant 80 miles of Baltimore, 90 from George Town†, and 24 miles from Potowmac river at Williamsport. Green Castle is a handsome village, situate 11 miles from Chambersburg, nearer the Potowmac, on the road to Williamsport, and 75 miles from Baltimore, and 79 from George Town. In several of the settlements, lands bear a high price, but when I came to average for the county, I estimated the acre at 4l.

Answer to query the second.—When you rent for mo-

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\* The lands have been averaged at thirty-five shillings to the acre; but I mention that there is a tract of fine land in this district, on the Susquehanna, called Connyochota; formerly the fields where the Marylanders and Pennsylvanians used to meet in battle array, contending for boundary; say upwards of 2000 acres, at from 10l. to 15l. an acre. A considerable share of this tract has been worked for upwards of 40 or 50 years, and is still capable of producing the best of grain without any manure.

† Adjoining to which, the new, or Federal City, for the permanent residence of the government of the United States is laid out—at the head of the tide navigation of the river Potowmac.

ney, you will seldom obtain more than four per cent. interest upon your purchase money.

The safest and most common mode is, I believe, to lease on the shares—where the lands are good, the lessor furnishes the one half of the seed grain, and obtains from the tenant one half of the produce of the grain, and implements. The grain delivered in the bushel—hay, &c. on the farm. By this way of leasing, we may have full six per cent. for the *purchase money*, or value of the lands. Plantations of inferior quality are leased on the thirds, that is, the lessor finds a third of the seed (or sometimes none) and obtains one-third of the produce of grain, hay, &c.

Lands formerly were purchased, and payment was to be made by installments, without interest, and the sums so moderate, that an industrious man could discharge them in the course of 10 years—few would lease, when they might purchase so cheaply. The vast quantity of back lands, induce a number to prefer actual purchase in a precarious situation, to leasing in the old settlements. However the descendants of the Germans are not as adventurous as some of their neighbours. They seem attached to peaceable habitations, and make the best tenants—real property with us seems to obtain a more fixed value, and cannot be had without an adequate price.

Answer to query third.

*Yield to the Acre, calculated by the Bushel.*

	Wheat	Rye	Barley	Speltz	Oats	Indian-corn	Buck-wheat	Potatoes	Turnips
	...	...	...	...	...	...	...	...	...
1st district . . .	15	20	25	35	30	25	25	75	150
2d district . . .	12	17	20	25	25	25	20	70	130
3d district . . .	10	12	15	20	20	15	15	60	75
4th district . . .	15	20	25	35	30	25	25	75	150

Beans and pease are not raised in any great quantity ; but the soil is, in general, not unfavourable to their culture. In the first district, they chiefly propagate the blue grass and clover, and the same may be said of part of Franklin county. In the residue of the district they depend on Timothy meadows—the former will yield one ton and a half to the acre, the latter two tons. The blue grass and clover have a second crop, which goes to about two-thirds of the first. The lucern grass, I should incline to think, would do well here, choosing favourable situations ; but I imagine it has not been sufficiently regarded. Some English grasses, brought over by the first settlers, also suit the soil.

Much hemp might be raised in these countries, were there proper encouragement—the foreign hemp gluts the markets, and there is not a sufficient protecting duty to spur the farmer to raise this useful article.

Our hemp lands would average a seven hundred weight to the acre (that is, what is called broken hemp) ; hackled flax may be calculated 100lbs. to the acre. I have endeavoured to average the productions, and believe I am rather under than over the quantity. In the fresh lands, or where they are moderately manured, we may safely add one-fourth more than I have set down. With European husbandry, much would, doubtless, be effected ; yet there are a few instances at York and Lancaster, where between 40 and 50 bushels of wheat have been raised to the acre. Barley yields greatly in the fresh or manured lands ; but sufficient encouragement has not been given to raise it. The market for this grain has been very fluctuating, and wheat has been sown in its place. I estimated potatoes, perhaps, too low, for when there is only a reasonable care used, we may speak of upwards of an hundred bushels to the acre ; but they are frequently carelessly planted, and not sufficiently attended to. I have known less than one acre produce upwards of four hundred bushels.

Answer to query fourth.—The towns I have mentioned in York and Franklin counties, carry on considerable trade, and purchase the produce of the country ; but much the greater part of the wheat and flour is transported to the Baltimore market by the farmer.

Upon a review of six years past (exclusive of the year

1790), I estimate the prices at the towns in the counties as follows :

*York County.**Franklin County.*

	per Bshl.	per lb.	Ton.	per Bshl.	per lb.	Ton.
	s. d.	s. d.	£.	s. d.	s. d.	£. s.
Wheat . . .	6 0	—	—	5 0	—	—
Rye . . . .	3 6	—	—	3 6	—	—
Barley . . .	4 0	—	—	2 0	—	—
Oats . . . .	2 0	—	—	2 3	—	—
Buck-wheat .	2 6	—	—	2 9	—	—
Indian-corn .	3 0	—	—	2 0	—	—
Speltz . . .	2 6	—	—	1 10 1-2	—	—
Potatoes . .	2 0	—	—	0 9	—	—
Turnips . .	1 0	—	—	—	—	—
Hay . . . .	—	—	3	—	—	2 5
Hackled-flax	—	1 0	—	—	1 0	—
Hemp . . . .	—	0 5	—	—	0 5	—

I have estimated the prices at the county market; you may allow a deduction of 4d. the bushel between the farm and the market; the difference as to flax and hemp will be very small. The expence of hauling hay depends on the distance. You may have a waggon and four horses for a day, in the winter, at 15s.

Answer to queries the fifth and sixth.

*York County.**Franklin County.*

	£.	s.	d.	£.	s.	d.
A working horse . .	20	0	0	17	10	0
Pair of working oxen	17	0	0	15	0	0
A milch cow . . . .	4	10	0	4	5	0
Sheep . . . . .	0	12	6	0	10	0
Hog . . . . .	1	10	0	1	10	0
Turkey . . . . .	0	2	6	0	2	6
Goose . . . . .	0	2	6	0	2	0
Duck . . . . .	0	1	0	0	0	9
Dung-hill fowl . . .	0	0	6	0	0	6
Pork, per lb . . . .	0	0	3 1-2	0	0	3
Beef . . . . .	0	0	3	0	0	2
Mutton . . . . .	0	0	4	0	0	3 1-2

	York County.			Franklin County.		
	£.	s.	d.	£.	s.	d.
Veal . . . . .	0	0	3	0	0	2 1-2
Butter . . . . .	0	0	8	0	0	8
New cheese . . . . .	0	0	6	0	0	6

Answer to query the seventh.—There is a very great iron market at York: you may estimate the ton of wrought iron there 28l.—and iron of a similar quality will command the same sum at Chambersburg.

Answer to query the eight.—I herewith give you a list of taxes laid upon the county of York since the beginning of the revolution, but they are all nearly discharged, and no new land-tax has been assessed by the State since the establishment of the general government. Pennsylvania has a considerable demand against the general government, and has a surplus revenue after paying all the debts, which is intended to be applied to the improvement of roads and navigation—no land-tax is expected to be levied by the State.

N. B. The demand of Pennsylvania against the general government, is not yet ascertained.

*List of Taxes laid upon York County by the Commonwealth of Pennsylvania.*

	In continental currency, which in 1781 depreciated to 150 for one in this State, and finally would not circulate.			In State-paper money.			In gold or silver.		
	£.	s.	d.	£.	s.	d.	£.	d.	d.
For 1777	12,721	4	9						
78	20,860	3	1						
79	324,863	1	3						
80	1174,447	18	10						
81				14,751	13	9	6,152	15	6 1-2
82							35,569	7	8
83				19,140	1	1			
84				8,268	15	7			
85				6,902	10	11			
86				14,032	0	2			
87				6,786	4	11			
88				6,906	1	9			
89				6,826	2	8			

During the war, there were a few instances where some additional taxes were laid upon non-jurors or non-associators in the militia. A rate of sixpence in the pound upon personal property, will, in general, be more than sufficient to pay the county-tax. The road and poor-tax will not come so high.

By the laws of the Union we pay a duty upon foreign importations, and an excise on wine and spirits of all kinds. He that drinks must pay.

Franklin county may be nearly in the same condition as to taxes. From the foregoing statements, it must appear that this county, from climate, soil, and situation, is favorable to agriculture. The hand of industry, with a good system, is only wanting to bring it to perfection, I imagine that if our farmers were to cultivate fewer acres, and attend them well, they would succeed better; a greater regard should be had to collecting proper manure.

I have given you my sentiments respecting the two counties, and shall be ready, during the winter, to grant any further assistance in my power.

I am, with the greatest respect,

Your most obedient and most humble servant,

*The President of the United States.*

*Frederick, Maryland, November 10, 1791.*

SIR,

AFTER many endeavours for assistance, in answering your inquiry into the agriculture, &c. of Montgomery, Frederic, and Washington counties, I was obliged to rely principally upon my own observations and conjectures; for, as very few measure their fields or produce, it is mere guess work, and they commonly think and speak the best of their own affairs. I wish my conjectures had more certain foundation than they have, yet I flatter myself they will mislead no body to his injury; they certainly are not calculated for that purpose.

I have the honor to be, with the greatest respect,

Your most obedient servant,

*The President.*

Montgomery County, Maryland.—The land in general, is what may be called with us of middling or rather inferior quality—it produces well when fresh cleared, but soon declines. It will sell according to quality, improvements, and the proportion left in wood, from 22s. 6d. to 5l. an acre—it has been very generally tended the first two years in tobacco, the third in Indian corn, and sown down in wheat. As common throughout the State, the tobacco is planted three feet distance each way, and the corn about six ; so that it has become a general estimate, that 4800 tobacco plants, or 1200 corn hills, take up an acre. The produce of tobacco is so various, as from four to ten plants to the pound, nor is that of Indian corn more certain. Such land as I have described, may be expected to yield for the first four crops, according to the seasons, a pound of tobacco for every six or seven plants planted, for some will fail. From 15 to 20 bushels of Indian corn, and from nine to 12 bushels of wheat, to the acre. After this destructive course, the land is often again planted the next year with Indian corn, and sown down again with wheat or rye, without any assistance. The crops accordingly lessen, till the land becomes so exhausted that its produce scarcely pays for the ploughing. If the land was well cleared, and a crop of wheat well put in, in the first instance, I have no doubt but the yield might be from 12 to 20 bushels an acre, and sometimes more. I judge, that from half to two-thirds of Montgomery county is cleared—a good deal of it is much impoverished, or, as we call it, worn out, though a great proportion of it lies well, and very little of it sandy—so that it is capable of improvement. This county is, in general, plentifully watered with good springs and small streams. Very little hay is made in it, though there might be a good deal of watered meadow. George Town, a good port for shipping, in this county, has, for some years past, been the best market for tobacco in the State, perhaps in America ; and the Montgomery tobacco is in high reputation. The labour of the people has therefore been, I may say, wholly applied in the cultivation of tobacco—fresh land produces the most certain crop, the easiest tended, and the best in quality. Baltimore lies convenient to some, and not very distant from any part of



the county. There and at George Town, the surplus wheat is disposed of—it may in a course of years average about 7s. a bushel.

The stocks of cattle of all kinds are neither numerous or good, so that there is little flesh provision raised in this county for sale, nor is there any surplus of Indian corn, which is generally from 2s. 3d. to 3s. 6d. a bushel. To say with us, that great quantities of tobacco are raised in any tract of country, implies without more, that the land is wasted, and no surplus of any thing made in it but tobacco. Some few plantations are not to be included within my general description; they are very good, are better managed, and would sell considerably higher. It may not be amiss to remark, that a part of the federal district lies within this county, and the federal city adjoins it. A great change may be expected to take place soon in the price of land, and the kind of cultivation.

Frederic county, Maryland, may be considered under a division of it into three parts. The Catoctin, and that part of the South Mountain which lie within it—the immediate space between those mountains, and the land lying to the eastward of Monocosity Valley,—and Monocosity Valley itself. The mountain land is very thin and stony, though generally covered with wood and timber; there are spots, however, settled all through; such, and the parts near the better land, sell from 15s. to 27s. 6d. an acre. Amongst the second class, there are here and there plantations equal in quality, produce, and price, to the Monocosity Valley: the rest may be compared with the Montgomery land. Monocosity Valley is about 35 or 40 miles in length, and eight or ten in breadth, with the river Monocosity running through it, and emptying into Potowmac. The land is generally in small farms of 100 to 250 acres. There is a plenty of limestone, and not so much as to be prejudicial; there are many pretty good streams, and most of the proper situations are improved by good burr mills. Indeed there has been a rage for mills, so that the milling is well done, and on cheap terms. In this part of the county, as every where else, there is great choice; very little land sells for less than 8l. or more than 8l. an acre; the average may be said to be 6l. We are from 40 to 50 miles from Baltimore and George Town, where wheat may average 7s.

a bushel; carriage to those markets costs usually 3l. a ton. With us, milch cows sell from 4l. to 6l.; draught horses fit for waggon or plough, 18l. to 25l.; smaller horses less, and exceeding good ones more. Prices at home—of wheat, 5s. 6d.; Indian corn, 2s. to 3s. 6d.; rye, 3s. 6d.; oats, 2s. 3d.; barley, or, more properly, bigg, 3s. 6d.; buck-wheat, 2s. Prices in the Frederick Town market—of grain, as at home; beef, 2d 1-2 to 4d; veal, 2d to 3d 1-2; mutton, 3d 1-2 to 5d per lb.; pork 27s. 6d. to 35s. per hundred; butter, 1s. The market is not considerable, and the same prices govern one amongst another in the county. Hay, 50s. to 3l. a ton.

Wheat is reckoned a cash article, and therefore the chief that we cultivate for market; we also raise Indian corn, for consumption on the farms, seldom with a view for sale, and have lately increased in the consumption of it. We raise rye also, for the chief feed of our horses. Our management of our land is, in general, far from deserving praise, though not so reprehensible as Montgomery. I judge the produce of land of 6l. an acre, may be, nearly (fresh cleared) in wheat, 20 bushels.

In corn the same; in rye rather more.

Fresh cleared land, growing in corn, sowed in wheat, 18 bushels.

Fresh land, a crop taken in wheat, and then planted in corn, 20 bushels.

Land not run hard, fallowed, and cropped in wheat once in three years, 20 bushels.

Fallowed, and cropped in wheat once in two years, 15 bushels.

If manured moderately it will rise to 20 bushels.

If pushed every other year, without manuring, it will sink to 10 bushels, and even lower. Land in general, with the same management, yields more rye than wheat, with this advantage, that rye leaves it lighter than wheat, and seems not to exhaust it so much. Strong land, of a proper soil, and well cultivated, will yield from 30 to 40 bushels of barley, or rather bigg, to the acre. Rich fresh bottom, yields 5 or 600, and highly manured land 6, 8, or 900lbs. of hemp to the acre; the cultivation of it has almost ceased. Flax is an uncertain crop. We break up our land in May or June, for fallow; begin to cross-plough it about the middle of July; harrow it across, plough in

the seed, from three pecks to a bushel to the acre, and sometimes lightly harrow with the ploughing. We seldom plough with more than two horses, and esteem from the 10th to the 20th of September, the very best time for seeding; the quantity of seed near a bushel, I think I have found, and is generally agreed, is the best. We are not so well agreed, whether another ploughing is helpful or otherwise.

Speltz are sometimes sowed on land too wet for wheat, of which we have a little: the yield shelled is much about the same as wheat. We cultivate but few potatoes, or turnips, the latter is always sowed on fresh land, and never hoed; the potatoes too, are commonly neglected; in particular instances, they have been well managed, the yield has been very encouraging, some say as far as 500 bushels to the acre; but one gentleman, on whom I can depend, told me he had not made less than 200 any one year, for several years together. Cabbages, parsnips, carrots, peas, and beans, have only been raised for family consumption: they succeed very well, as do almost all garden plants and fruits.

I have myself raised hops and madder: I believe they are with us of superior quality. A brewer told me he had bought the crop of five-eighths of an acre of hops, which turned out 1200lbs.; and several Germans, as well as one Englishman, acquainted with madder, have told me, it is as good here in two years as in Europe in three.

A small meadow is a common object with every farmer; it is of Timothy, or natural grass; the Timothy is mowed but once a year, the natural grass twice: either, that is esteemed good, produces, in the year, from a ton and an half to two tons an acre; but many, from unfavourable situation or neglect, turn out much less. We also often have clover patches; they are commonly cut and fed green, and seldom made into hay. Some few farmers, in the spring, sprinkle clover-seed on wheat, for pasturage, but it is rare, though every body approves it. Apples; pears, quinces, the morrello and common cherries, are in high perfection, and with little trouble. Peaches, apricots, nectarines, and cherries; of the more delicious kinds, do not thrive so well here as near to the bay; yet these and plums, in all situations sometimes, and in some situations almost every year, are very good. We have

too, the black mulberry in plenty ; exotic grapes thrive very well, and the native grape, of which there is great variety, have, in some instances, been much improved by culture.

The price of bar-iron is from 28l. to 30l. a ton, coarse iron-work from the smith double the price of the bar. Labourers, by the year, about 20l. ; by the month, 40s. and found every thing but clothes. Reapers and mowers, by the day, 3s. to 3s. 9d. and found ; about a pint of whiskey, or common rum, is indispensable ; a good reaper cuts, binds, and stacks, about three-quarters of an acre of wheat, of 20 bushels to the acre, a day ; a mower mows about his acre.

Washington county, Maryland, may also be divided in the same manner as Frederick.—Connogochege Valley is about 20 miles in length and breadth, and has Connogochege and Antitem creeks running through it, and emptying in the Potowmac. This valley has more limestone than Monocosy, is rather stronger, and, its inhabitants say, exceeds it in produce ; I believe it does. The prices of land, labour, hire, cattle of all kinds, as well as the kinds of produce, and manner of cultivation, is so much alike, that a particular enumeration would be but a repetition. It lies 30 or 40 miles farther from the ports, and the grain is generally 6d. or 8d. lower. They too have a plenty of very fine mills, and their wheat is chiefly carried to market in flour. The other parts of Washington are much the same as the inferior parts of Frederick. The improvement of the inland navigation on Potowmac, is likely to lessen greatly the expence of the carriage of the produce of these counties, and of course render the lands much more valuable.

It may be remarked, and seem strange, that I have estimated the produce of the richer and poorer fresh lands in their first crops not very different. I believe the fact will justify me, for land of middling and inferior quality, for the first two years, makes a very vigorous exertion.

I have confined myself chiefly to what I believe is the present actual general state of things ; and when the price of land and of labour is considered, it will not seem wonderful that men will generally, as they are able, go into new purchases, rather than highly improve their own lands ; but general as the practice is, it is not universal.

There are instances among us, of 30 bushels of wheat, on an average of years, being raised to the acre, on particular, manured, and highly cultivated spots ; and, from essays, it is a common opinion, that good land, highly cultivated, and manured, will produce from 40 to 50 bushels of Indian corn to the acre, and even more.

Mr. EDWARD TILGHMAN, now dead, had three squares of 20 acres each ; he tilled one in tobacco—tobacco was not the first object with him, it gave place to his wheat ; on a particular day in September he cleared his ground of the tobacco, whether so ripe as he wished or not ; he seeded it in wheat ; he let nothing in till the May after harvest, unless his calves in the fall, and before hard frost. He, the next year, pastured 20 cows on the same field ; they were turned in with discretion, twice or thrice a day for an hour or two at a time ; he stabled his cows, and manured for tobacco—he thus went round many years. I was at his house upwards of thirty years ago, and saw those fields ; it was about the 5th of May—one was then in very strong wheat—in the second, the white clover was considerably more than ankle high, with 20 cows, one or two more or less, feeding on it ; and the third was ploughed up for tobacco, from which, he then told me, he had the preceding year made 1400lbs. of butter. He has told me, that his tobacco has generally turned out 1000lbs, to the acre ; and his nephew told me, some years, about twelve years after, that his wheat, for 15 years, had averaged 32 bushels and a fraction to the acre. We have land in this neighbourhood, full as good, naturally, as Mr. TILGHMAN's, which is in Queen Anne's county ; and the crops are rather more certain in this than in that part of the country. Indeed we are very seldom injured by mildews, scab, or blight ; the last we scarcely know. Mr. TILGHMAN also has told me, that he had upwards of 500 bushels of head turnips to the acre.

As soon as the wood is taken off our strong land, it is covered with white clover, which seems as natural to the soil as wood ; if the land is not so light as to push the wheat into straw too much, 20 bushels an acre may be expected the first crop. Those who are acquainted with cultivation, know that manured land will produce more grain, or seed, than the richest fresh land, and may calcu-

late for themselves what may be expected from fresh land, under good management.

The truth warrants it, and it may not be amiss to remark, that the territory of Columbia\* is the point where the general productions meet in greater perfection than any other, and that from thence some improve or decline towards the east, and others towards the west, in at least as small distances as towards the north and south. Grass, grain, and fruits of all kinds are very good. To the southward and eastward, grass, wheat, rye, oats, and apples, are less perfect, or produced in less quantities. Cherries, of the more delicious kinds, peaches, apricots, nectarines, figs, and melons, improve. To the northward and westward the latter are not so perfect—the former improve, till the neighbourhood of this, and especially in the mountains. Apples are equal to those of the Jersies.

Our wheat is commonly 60lb.—this year 63, and some of it 67. Our grass, rye, and oats, better. Pursuing the west to the Allegany, you come into a country equal, perhaps, to any in the world, for grass, rye, oats, potatoes, and flax, as well as excellent for wheat—it is generally said, that the oats weigh 46 ; wheat from 64 to 67. That the potatoes are abundant, of uncommon size, and excellent in quality—and that the hackled flax is generally a yard long—some of it is certainly so.

Note.—To convert currency into sterling, take off two-fifths.

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*Hyde-Park, Fairfax County, Virginia, Nov. 18, 1791.*

DEAR SIR,

A DESIRE of conversing with the most intelligent persons in my neighbourhood, and instituting a correspondence with others, on the subject of your inquiry, will, I hope, plead my excuse, in being so late in answering your letter of August. I never entertained very high opi-

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\* *Columbia is the name of a district 10 miles square (in which is the new, or Federal City) over which the general government, by constitution, has exclusive jurisdiction.*

nions of our system of farming, but what I had is certainly lower than it was. Our farms are, in general, too large to admit of much nicety, and, I believe, it would be unhappy for us to have any great desire to be so, with our black labourers, and the more worthless wretches we employ to overlook them. The manner too, in which our attention has been engrossed by the cultivation of tobacco, and large quantities of Indian corn, has, no doubt, had some share in rendering us slovenly farmers. Having had, hitherto, plenty of fresh land for these articles, we have disregarded every means of improving our opened grounds, either by manure, or laying them down in grasses—but as we begin now to set some store by our woods, and tobacco has declined so much in value, that people are generally exchanging tobacco for wheat, I flatter myself, the face of our country will soon assume an appearance, that will not only do honor to our climate, but ourselves—indeed it has long been evident to me, that our sagacious northern brethren, not only considered our climate as superior to their own, but our lands too as capable of being made so, from their constant annual emigrations among us. As we may be said to be entirely indebted to these for the best farms among us, it is very desirable that they should happen in a tenfold ratio.

Although, from a comparative view of the exports of wheat from the several States in the Union, it appears that considerably more of that article is annually exported from Virginia than from any of the professedly farming States, still it has scarcely, hitherto, been considered as a secondary object on our farms. Till very lately, the practice of fallowing grounds for wheat, was seldom followed, and even now, it is by no means so general as could be wished. The usual mode of sowing it has been, and is now, too generally, in our own corn-fields, when the Indian corn is laid by, and which are cultivated every second or third year, without receiving any manure, or being laid down in clover after the crop is taken off. Those who are considered as the best farmers, and fallow most, trust entirely to their ploughing. Their fields are too extensive for the manure raised from their stock, and we have as yet no other in use. I thought it necessary to premise thus much, generally, respecting our mode of agriculture, to prevent our climate and soil being unjustly

blamed for what we alone are chargeable. It is applicable to the whole State, I believe. I shall now take your queries in their order, and consider first the lands in Fairfax county, which is situated on the river Potowmac, and bounded by it for near 40 miles. The lands here, are generally thin, and the soil a stiff clay. At a little distance from the river, they are rather hilly and broken. The pasturage in summer, is better than might be expected from the appearance of the land, for, notwithstanding all our bad management, our fields yield the white clover plentifully, and I am satisfied no grounds can turn out the red clover to better advantage, where they are well manured. Though the county cannot be considered as abounding so much in meadow lands as some others, yet there are few people but have them. On the river, the most valuable grounds for meadows, the Pocasons, are still unreclaimed, and, indeed, in every part of the county, some of the most valuable grounds for meadows, are still in their natural state. I cannot inform you of the proportion of meadow-land to the arable, for accuracy in these matters is out of the question in Virginia: nor of wood-land to either: but I think I am not wrong with respect to the latter, in saying, that better than half the county is still in woods. In the upper parts of the county, from ten to 20 miles from the river, the soil is much intermixed with stones. The average yield of wheat, in the mode of agriculture which I have already mentioned, was practised with us, is about six for one—in fallowed grounds, about eight and ten for one.—The old tobacco grounds which have been well manured, will yield from 20 to 30. The average yield of oats and rye, which have also but a poor chance (being generally sowed in old worn out corn fields) is from 10 to 15, for one; buck-wheat from 15 to 20.—Barley is not cultivated here.—Indian corn, from 10 to 15 bushels an acre. As to pease, beans, potatoes, and turnips, our lands yield them very well; but as they are not raised for market in general, I can't say what may be their average product per acre. It has ever appeared to me, that if the farmers in Europe, who lay so much stress upon these articles in their writings, had our excellent substitute for them, Indian corn, they would only regard them as we do, for cu-



linary purposes. The chief grass cultivated here is the Timothy—the average product of it, per acre, is about a ton. It is certainly the best adapted to our hot suns, and particularly our slovenly management of any grass; and this, perhaps, is the best reason which can be given for our attending so little to any other.—Of hemp, we raise scarce any in this county; and of flax, as we raise it only for our own domestic purposes, all I can say of it is, that it grows very kindly and plentifully. The fee-simple prices of lands at the distance of 10 miles from the river and town of Alexandria, is from 20 to 40 shillings per acre, according to quality. It is remarkable, that lands in no respect superior, on the opposite side of the river, in Maryland, and equally distant from the river, sell currently at 4*l.* and 5*l.* per acre. I know not how such a difference is to be accounted for, but from the greater degree of population in proportion to their country. The same circumstance must, I suppose, account for the lands in Virginia being generally so much cheaper, though equal in quality, and possessing a milder climate than the lands in the northern States. The rents of our lands have increased much within these few years. From the first statement of the country, till lately, it was the practice to rent them on leases for two and three lives, at so much tobacco a hundred acres; very often not more than two hundred pounds of tobacco an hundred—at present, however, from the uncertain price of tobacco, the rents in that article are become unusual; so that the common mode of renting is now, either by the year, or for a term of 10 or 20 years, and at the rate of 8*l.* to 10*l.* an hundred. This mode is preferred by the tenants, from an idea which, I believe, to be natural to the human mind, that of becoming one day lords of their own little territory. I think it is often cherished by our people, to an excess which frequently injures them.

The lands in Prince William county and Fauquier, from 20 to 30 miles from Dumfries (a town on the Potowmac, about 30 miles below Alexandria) are, I think, much superior to the lands in Fairfax, being both more level and richer, with a greater quantity of meadow land, though they make still less of it than we do—their system of farming is, certainly worse than in Fairfax. Hence, their yield of the several kinds of crops, though on better land,

does not average more than with us. They have been, and are still, more unfortunately attached to tobacco than we have been. The soil of both these counties is much alike, being of a reddish clay ; at the distance of two or three feet from the surface, a thin stratum of a stone resembling slate is found ; hence, their springs are not so abundant, nor is the water as good as could be wished ; but when wells have been dug, the water has been found as good as any where. The average fee-simple prices of their lands, are from 20s. to 30s. an acre—the terms of rents are much as they are in Fairfax.

The county of Loudoun lies on the Potowmac, above Fairfax, and is, perhaps, the best farming county in the State, being thickly settled with Quakers and Germans, from Pennsylvania. The lowest corner of the county is about 10 miles from tide-water, and it extends up the river with the meanders thereof, upwards of 50 miles. It is well supplied with springs, water-courses, and meadows ; what are called the bottom lands on the river, are very rich, but the soil throughout the county is generally stiff, and of a reddish cast. The upper parts of the county are mountainous ; better than half the county is in woods, as is also the case with the two last mentioned counties. Much more attention is paid to meadows here, than in either of the counties yet mentioned, it being the first object, in general, in every settlement, and their chief concern afterwards. The bottom lands on the river sell from 3l. to 5l. an acre ; in the interior part of the county from 1l. 10s. to 3l. an acre. There are many leases, for lives in this county, given some years ago, by gentlemen holding quantities of lands, at 2l. and 5l. an hundred acres ; but the common mode of renting, on the expiration of leases, is for a term of years not exceeding, in general, 21, and from 10l. to 20l. an hundred acres. It is also common, in many instances, to rent, for one-third of the produce. The average produce of wheat per acre, is from 8 to 10 bushels on their common lands, which, like those in Fairfax, have been much exhausted. Their fresh, or river lands, produce from 10 to 15 bushels ; the average produce of Indian corn is about 15 bushels ; of rye, 20 ; speltz, 30 ; oats, 25 ; and barley 30, though the last is chiefly raised for the purposes of home-brewing, and by

the Germans. They manufacture most of their own linen and woollens in this county, and distil most of the spirits used, from rye, peaches, and apples, and make a considerable quantity of cyder for market: they also make many waggons for sale, and almost all iron utensils for their own use. Their meadows yield them better than a ton an acre. I forgot to mention above, the produce of buck-wheat; I am told that the Germans and Quakers frequently raise it from 30 to 60 bushels an acre. What I have already observed with respect to the smaller produce of the farm, peas, potatoes, &c. must suffice for all the counties I have to mention. I have no doubt but the Germans and Pennsylvanians of Loudoun would reap more profit from them than we do; but their distance from market has hitherto prevented them from raising them for sale, and we seldom attend to what is consumed on the farm.

I shall now proceed to Berkeley, which, in point of fertility, is, without doubt, the richest county in the State. This county lies also on the Potowmac, and is penetrated by the Shenandoah, which empties into that river. The lands here, which are called the Valley, running parallel with the Shenandoah, and between that and the north Mountains, may be divided into four classes:—the first quality sells at 4l. an acre, second at 3l. third at 2l. and fourth at 1l. 10s. in fee-simple. The mode of renting lands is here too, either by the year, or a short term of years, as there are no lands which rise faster in value. The first quality rents from 20 to 30l. an hundred acres; the other qualities in proportion; and none for less than 10l. The lands of the first quality are considered as too rich for wheat, and, in the general method of seeding, do not succeed so well as those of the second; being more liable to fall, and the rust. It is probable this may proceed from their not giving it seed in proportion to its strength, or from their sowing it as early as their other grounds. That very rich grounds do not succeed so well on early sowing, I am convinced, from several trials which I have been witness to, by a neighbour of mine on a rich island. This spot, which, when sowed in August, would yield scarcely any thing but straw, when sowed in the latter end of October, or first of November, yielded abundantly. The second quality produces from 15 to 20 bushels, when fall-

lowed ; the third from 10 to 12 ; and the fourth from 8 to 10. The first-rate lands produce from 40 to 50 bushels of oats per acre, and rye in proportion ; the other qualities from 20 to 40. Indian corn from 20 to 40 bushels, according to the quality of the land, and buck-wheat from 30 to 60. Barley would, no doubt, succeed well on such lands ; but I am informed that they raise none. The natural meadows are certainly superior to any to be met with any where ; what is called the English blue grass, flourishes in the greatest luxuriance, and is common throughout the county. The average crop of Timothy is nearly two tons an acre. The soil of the best lands is dark and fine ; of the second lighter, and intermixed with soft stones ; that of the third and fourth rates still lighter. The whole surface of the ground, when cleared, is covered with blue grass. I must now observe, with respect to the counties of Loudoun and Berkeley, that the completion of the navigation of the Potowmac (which we expect will happen, at the farthest, in two years) will be attended with immense benefits to them. Their produce, of every sort, will be brought to market on as cheap terms as those who live at the distance of eight or ten miles. This circumstance, added to the superiority of their lands, certainly renders them the most desirable of any counties in the State ; and when it is considered that they already have the two flourishing towns of Alexandria and George Town for their markets, and an act of Congress for establishing their permanent residence between these places, I think it cannot be doubted that they are the most eligible situations in the Union. In the subjoined table, you have the prices current, as accurately as I could ascertain them.

Prices current, in Virginia money, 6s. the dollar—Best horses, from 20l. to 25l. ; second rate, from 12l. to 20l. ; small horses may be bought much lower. Oxen from 8l. to 15l. a pair ; steers unbroke, at 2l. 10s. to 3l. ; best milch cows at 4l. ; second-rate at about 2l. 10s. to 3l. ; veal, at 2d. to 2d. 1-2 and 3d. per lb. ; mutton, at 3d. per lb. ; pork, from 20s. to 30s. per 100lbs. ; butter from 6d. to 8d. per lb. ; cheese, from 4d. to 6d. per lb. ; tallow, at 8d. per lb.\* Sheep, from 6s. to 15s. ; hogs, 12 months

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\* *Mutton 3d. and tallow 8d. ! Fat sheep not too common.*  
A. Y.

old, from 12s. to 15s. according to size ; beef, at 2d. to 3d. ; geese, from 1s. to 2s. ; turkeys, 2s. ; ducks, from 6d. to 9d. ; hens, from 6d. to 8d. ; chickens, from 3s. to 4s. per dozen.

Wheat, about 4s. 6d. per bushel ; buck-wheat, 2s. ; corn, 2s. ; beans and peas, 3s. to 4s. ; turnips and potatoes, from 9d. to 1s.

Hackled flax, from 1s. to 1s. 3d. per lb. ; hemp from the break, from 28s. to 30s. per 100lbs. ; iron, from 25l. to 27l. per ton.

In the county of Fairfax, from its vicinity to market, several of the above articles will average higher.

### *Rates of the Taxes on Property.*

	<i>s.</i>	<i>d.</i>
On land, for every 100l. valuation . . . . .	7	6
On Negroes, each above 12 . . . . .	2	6
On horses, each . . . . .	0	6
On chariots, per wheel . . . . .	9	6
On riding chairs, per wheel . . . . .	3	0
Parish levies from 10 to 30lbs. of tobacco per tithe-able.*		

County taxes much the same. The two last vary each year, according to the number of poor to be supported, and the number of criminals ; but for the latter we are reimbursed by the public.

Our taxes have been also been diminishing every year since peace, so that no country has less reason to complain of public burthens at present.

The above is a list of our State taxes. The only tax imposed by the general government, and which the farmer feels, is the tax on stills ; this is about 6d. a gallon. Though, from its novelty, it has excited some murmurs, I cannot think it can be considered as unreasonable, or improper, by those who reflect either on the great injuries

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\* *White males, and negro males and females, above 16 years of age, are subject to this tax. The tobacco with which it is paid may, on an average, be estimated at three-halfpence per lb. Note in General Washington's handwriting.*

produced by the cheapness of distilled liquors among us, or the excessive profits made by the county distillers.

I cannot conclude, without regretting that I have not been able to find you a more accurate account, in many particulars. I flatter myself it is at least a faithful one : I have used my best endeavours to make it so. It has certainly not been in my power to pay any compliments to our farmers for their management.

I am, dear Sir,

With the greatest respect,

Your most obedient servant.

*The President of the United States.*

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The following detached information is communicated by persons on whose knowledge and accuracy reliance may be placed.

The Writer hereof is best acquainted with that tract of land which crosses Virginia, from northeast to southwest, by the names of the Bull-run Mountains, South Mountains, and Green Mountains, and is generally six or eight miles wide, one half of which is the mountain itself, and therefore steep ; the residue lies at the foot, on each side, in large waving hills, perfectly accessible to the plough. It is of a dark red colour—the richest of it is a pure mould, or loam, without the least mixture of sand or grit, though often a good deal of broken stone ; when first cleared of its timber, it lies loose for about a foot depth, that is to say, as far down as the frosts have penetrated, but below that, for many feet, the earth is still the same, but hard, as having never yet been opened by the frost ; when it has been turned up by the plough, and has been exposed to the frost a winter or two, it is nearly as rich as the original first soil. This land is excellent for wheat and rye, but yields poorly in oats ; for Indian corn it is middling. The fruits which abound are apples, peaches, and cherries. The country perfectly healthy, and the climate more moderate in summer than that below, and in winter than that above. Most of the parcels of land held by individuals, have been so laid out, as to contain about one-third of the first quality, as above described ;

one-third of a middling quality ; and one-third of barrens well timbered. The husbandry is, in general, very slowly—under such as it is, the lands of the first quality will produce 30 bushels of wheat to the acre, when fresh, and being tended alternately in wheat and Indian corn (the latter of which is a great exhauster) without ever being rested or manured, they fall at length down to eight or ten bushels the acre. The soil of middling quality will yield 12 or 15 bushels of wheat the acre, when fresh, and fall down to about eight. The grasses which have been found to succeed best, are red clover and orchard grass ; green sward does well also ; only one good cutting of these can be counted on, unless the ground can be watered. A tract consisting of the three qualities before mentioned, in equal quantities, in that part which lies near the Rivanna river, say about Charlottesville, will sell for about 22s. 6d. to 27s. 6d. sterling the acre, on an average ; it will be more or less, in proportion as there is more or less of the best or worst qualities—produce is water-borne from hence to the tide-waters 70 miles distant. Advancing north-eastwardly along the same mountains ; these lands are dearer, though their produce cannot be water-borne till they reach the Potowmac. Going south-westwardly along the same mountains, lands become cheaper. Where they cross the Fluvanna, or James river, they are about two-thirds of the price before mentioned ; and from that part their produce may also be water-borne to tide-waters 130 miles distant.

Ordinary prices about Charlottesville are as follows :

A labouring negro man is hired by the year, for 9l. sterling, his clothes, and food.

A good plough-horse costs 10l. to 12l. sterling.

A cow, 30s. ; a sheep, 6s. ; a sow, 10s. ; a goose, or turkey, 2s. ; a dung-hill fowl, 6d.

A bushel of wheat, 3s. ; of rye, 22d. 1-2 ; of Indian corn 1s. 6d.

Beef in autumn, and pork in winter, 16s. the 100lbs. ; bacon, 6d. to 8d. the lb.

Hay, 45s. the ton.

*August 3, 1791.*

DEAR SIR,

AGREEABLY to your request, I have now the pleasure to send you an extract of my letter to ARTHUR YOUNG, Esq. relative to the prices of the following articles in Pennsylvania, viz.\*

Wheat, per bushel, 6s. to 6s. 4d.; rye, 3s. 9d. to 4s.; Indian corn, 2s. 6d.; oats, 1s. 8d.; barley, 4s.; clover hay, per ton, 4l. 10s.; beef, per 100lbs. 25s.; pork, 27s. 6d.; a good working horse, 20l.; a pair of good working oxen, 900lbs. each, 20l. to 24l.; a milch cow and calf, 5l. to 6l.; store sheep, by the flock, 10s. to 15s.; wool, —; dressed flax, —; bricks, per thousand, 22s. 6d.; stone-lime, per bushel, 11d. to 1s.; cultivated farms of good land, in the old counties, not within twenty miles of Philadelphia, extremely various; the average, at random, perhaps, 5l. per acre.

The par of exchange with Great Britain, 166 two-thirds.

An English guinea passes current at 35s.

With respect to taxes, the second object of inquiry, my information is as follows; and I believe it may be relied on:

	Acres in each Farm.	Poor Tax.	County Tax.	Road Tax.
Franklin county, . . . .	360	none	none	35s.*
York county, . . . . .	500	none	40s.	30s.
Northumberland county, . . . .	300	none	10s.	30s.†
Fayette county, . . . .	364	15s.	10s.	none
Cumberland county, . . . .	650	2s. 6d.	60s.	27s.
Chester county, . . . .	500	35s.	70s.	35s.
Delaware county, . . . .	450	30s.	60s.	60s.
Washington county, . . . .	300	none	20s.	12s.†
Philadelphia county, . . . .	80	16s. 10d.	22s. 5d.	15s. 2d.

\* This is a letter from Mr. POWEL, President of the Agricultural Society of Philadelphia.

\* Last year.—† Highest in the county.—‡ Higher than usual.



The foregoing are the taxes on the farms, containing the number of acres mentioned in the list in the different counties. The respective sums make the aggregate of the taxes upon each farm in the respective counties.

It is here to be observed, that there are farms in the oldest, as well as in the newest counties, set down in the list. If the information appears to you in any respect deficient, I will endeavour to procure such as may be more satisfactory; though I think what is herein contained, must convince Mr. Y. that our present taxes are very moderate.

If on this, or any other subject, I can be of any use to you, I beg that you will freely lay your commands on,

Dear Sir,

Your affectionate,

And obliged humble servant.

Philadelphia,

October 24, 1790.

*His Excellency, the President of the United States.*

*Philadelphia, June 18, 1792,*

Sir,

YOUR letter of the 18th of January was received about a fortnight ago. For the Annals, which you have had the goodness to send me, I pray you to accept my thanks.—No directions having accompanied the second set, and presuming they were intended for the Agricultural Society in this city, I have, in your name, presented them to that body.

As far as it is in my power, I will endeavour to solve the doubts which are expressed in your queries, contained in the above letter: and first "Labour is so slightly touched on, that I know not how to estimate it."

The information on this, as well as on other points of my last communication, was given in transcripts of the letters I had received in answer to certain queries, hastily submitted to some intelligent gentlemen of my acquaintance, in the State of Pennsylvania, Maryland, and Virginia. If, therefore, the article of labour was not

sufficiently enlarged upon ; or, if there appeared too great a diversity in the price of this article ; in that of land ; and of other things, to be easily reconciled and understood ; you must ascribe the inconsistency, or omission, to that cause, and to the habits and value which is set on these things in the different States, and in different parts of the same State.—South of Pennsylvania, hired labour is not very common, except it be at harvest, and sometimes for cutting grass. The wealthier farmers perform it with their own black servants, whilst the poorer sort are obliged to do it themselves. That labour in this country is higher than it is in England, I can readily conceive. The ease with which a man can obtain land in fee, beyond the mountains, to which most of that class of people repair, may be assigned as the primary cause of it. But high wages is not the worst evil attending the hire of white men in this country ; for being accustomed to better fare than, I believe, the labourers of almost any other country, adds considerably to the expence of employing them ; whilst blacks, on the contrary, are cheaper, the common food of them (even when well treated) being bread made of Indian corn, butter-milk, fish (pickled herrings) frequently, and meat now and then ; with a blanket for bedding. In addition to these, ground is often allowed them for gardening, and privilege given them to raise dung-hill fowls for their own use. With the farmer who has not more than two or three negroes, little difference is made in the manner of living between the master and the man ; but far otherwise is the case with those who are owned in great numbers by the wealthy ; who are not always as kind, and as attentive to their wants and usage, as they ought to be ; for by these they are fed upon bread alone, which does not, on an average, cost more than seven dollars a head per annum (about 32s. sterling).

From these data, in aid of my last communications, you will be able to form an idea of the cost of labour in this country. It varies, however, in the different States, as I have already observed, and sometimes in the same State ; but may be said to vibrate with white men, between ten and fifteen pounds ; and for black men, between eight and twelve pounds sterling, per annum, be-

slides their board. No difficulty, I should conceive, would be formed in obtaining those of either description, on the terms here mentioned ; but I do not advance this with certainty, not having been in the habit of hiring any myself, for several years past. Blacks are capable of much labour, but having (I am speaking generally) no ambition to establish a *good* name, they are too regardless of a *bad* one, and of-course require more of the master's eye than the former. Formerly, I have given to *skilful* and *cereful* cradlers, a dollar a day, during harvest, which was a sixth more than the usual price ; but then, I knew the men, and that they would oblige themselves to cut *clean* and lay *well*, four acres of wheat a day (if it did not stand very heavy on the ground) ; or, if I preferred it, they would cut by the acre, paying them at the rate of a dollar for every four acres. There are men, who will rake and bind as fast as the cradlers will cut the grain, but to do this is deemed hard work, and when done, entitles them to cradlers' wages. These people eat three times a day (once, perhaps, of milk), and are allowed a pint of spirits each man. A barn-floor, with straw and a blanket, serves, them, at *harvest*, for lodging.

When I observed in a former letter, that " all our labour was performed by negroes," I must have alluded to the custom in Virginia, the State in which I then lived, and from which I wrote ; but my last communication to you was on a more extensive scale, comprehending the practices and prices of Pennsylvania and Maryland, as well as different parts of Virginia ; which (latter) is a State of great extent, differing much in its products and culture.

The English statute acre is the measure by which we have hitherto bought and sold land ; and the price of land, as handed to you in my last, includes buildings, fences, arable, meadow, in short, the improvements of every sort appertaining to the tract on which they are placed. To a stranger at a distance, this aggregate mode of estimating the value of a farm is, it must be confessed, dark and unsatisfactory ; but to the parties present, who see and examine every thing, and judge for themselves, it is quite immaterial. The *seller* warrants the title and quantity which he sells, and both form an opinion of the total worth of the premises. It rarely happens, however, that build-

ings and other improvements are estimated by the purchaser at near what they cost the seller, especially on *old* farms, which have been a good deal worked; the received opinion being, that fresh land, without improvements, is more to be desired, than worn and much abused land is, with such as are usually found thereon: but this is to be considered as a general, not an invariable rule; for the better and more attentive farmers keep their farms in high order, and value the improvements accordingly. Never having been in England, I ought not to hazard an opinion, or attempt a comparison between the soil of that country and this, in their virgin and unimproved state; but from what I know of the one, and have heard of the other, I should decide in favour of the latter, at a distance from the Seaboard; which, from the high lands of the Never-sink (in East Jersey) to Florida inclusively, is flat, and, with but few exceptions, sandy, and generally of mean quality. From the falls of the rivers to the mountains, which is generally from 60 to 100 miles, and above the latter—except the craggy hills and mountains which lie between the eastern and western waters—the best lands are to be found. They are strong, and, after having been used, and abused in a shameful manner, will, with a little repose, get covered with white clover. The upper country is healthiest also.

You seem surprized, and no wonder, to hear that many of our farmers, if they can be so called, cultivate much ground for little profit, because land is cheap, and labour is high; but you will remember, that when I informed you of this fact, I reprobated, at the same time, both the practice and principle. The history, however, of it is this—a piece of land is cut down, and kept under constant cultivation, first in tobacco, and then in Indian corn (two very exhausting plants), until it will yield scarcely any thing;—a second piece is cleared, and treated in the same manner; then a third, and soon, until probably, there is but little more to clear. When this happens, the owner finds himself reduced to the choice of one of three things—either to recover the land which he has ruined, to accomplish which, he has perhaps neither the skill, the industry, nor the means—or to retire beyond the mountains—or to substitute quantity for quality, in order to raise something. The latter has been generally adopted, and,

with the assistance of horses, he *scratches* over much ground, and seeds it, to very little purpose, as you may suppose, and have been informed ; for I presume an English farmer would bestow more labour on *one* acre, by deep and frequent ploughings, besides the dressings, he gives to the land, than the other does on *five* acres. It is but justice, however, to Pennsylvania, to declare, that her husbandry (though not perfect) is much better, and her crops proportionably greater. The practice above-mentioned applies more particularly to the tobacco States, which, happily, are yielding more and more every year to the growth of wheat ; and as this prevails the husbandry improves. Instances could be enumerated, and where no extraordinary dressings or management has been used, of land yielding from 30 to 40 bushels of wheat per acre, that *has been* very much exhausted.

Your mode of calculating the taxes in this country, being unusual *with us*, I may not accurately understand ; and as the Virginia method was, if I recollect rightly, detailed in my former accounts, I know not how to give you a more distinct idea of them, than by exhibiting the items of the specific charges on every species of taxable property, viz. on land, negroes, stock, &c. This, as it respects an estate in Virginia, with which I am very well acquainted, I am enabled to do, and will do. We have a road-tax besides, but it is light, and, in most of the States, paid by a contribution of labour, which rarely exceeds two days in the year, for each male labourer. Dutiable articles is a distinct tax, the quantum of which depends upon the consumption, upon the disposition of the consumer : with the aid, therefore, of the laws (which I sent you) every man can calculate, better than I am able to do for him, the amount of his own expenditures in this way. An additional duty, or excise, was imposed last session, and this being now sent, will, if am not mistaken (with what was mentioned in my former communications) bring *every tax, direct and indirect*, to your view, to which property in this country, is subjected, either by the general government, or the laws of the States of Pennsylvania, Maryland, and Virginia, to which the observations have been confined.

Beef, and other meats, grain of all sorts, and flour, butter, cheese, and other things, in quantities to make

them an object, are always, I conceive, in demand ; and are sought after by the purchasers. The sale of lesser articles, at a distance from market towns, may sometimes stick on hand, but rarely, I believe forego a sale, if they are worth the transportation.

Sheep thrive very well in the middle States, though they are not exempt from diseases, and are often injured by dogs ; and more so as you approach the mountains, by wolves. Were we to use horses less, and oxen more, on our farms (as they do in the New England States), we should, unquestionably, find our account in it ; yet, strange as it may seem, *few* are in the practice of the latter ; and *none* push the raising of sheep to the extent they might, and ought to do.—The fact is, we have, in a manner, every thing to learn that respects neat and profitable husbandry.

BAKEWELL's breed of sheep are much celebrated, and deservedly, I presume ; but if entrusted to a common bailiff (or with us is called an overseer) they would, I should apprehend, soon degenerate, for want of that care and attention which is necessary to preserve the breed in its purity. But the great impediment is the British statutes ; these discourage men of delicacy, in this country, from attempting what might involve the master of a vessel in serious consequences, if detected in the breach of them. Others, however, less scrupulous, have attempted to import English rams with success, and, by this means, our flocks, in many places, are much improved—mine, for instance, though I never was concerned, directly nor indirectly, in the importation of one, further than by buying lambs which have descended from them.\*

Our modes—system we have none—are so different from yours, generally speaking, and our business being carried on so much within ourselves, so little by hiring, and still less by calculation, that I frankly confess to you, I am unable to solve your query respecting sheep-walks, or how many sheep an acre of woodland pasture would support. I shall have pleasure, at all times, as far as I possess the means, or can command them, to give you every information that can contribute to your *own* satisfac-

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\* *The average weight of the fleeces being 5 lbs.*

tion, or that of *a friend*; but I am so thoroughly persuaded of my inability to throw new lights upon any branch of husbandry, in a country where it is so well understood as in England, and that any thing I could write to you on that subject, would only serve to expose the defective practice of my countrymen, and be considered as the beacon of our ignorance, that I am rather disinclined to see any production of mine in a work where so much useful information is conveyed to the public, as is to be found in your *Annals of Agriculture*.

With very great esteem,

I am Sir,

Your most obedient servant.

G. WASHINGTON.

*P. S. June 21st.*—I have not yet received the account of taxes I promised you, and for which I had written to Virginia; but I will send it by the first conveyance after its arrival.

This letter goes by Mr. PINCKNEY, Minister from the United States to the Court of London,\* who, being detained a day or two longer than was expected, by the vessel in which he is to embark has given me an opportunity of asking Mrs. JEFFERSON (who is well acquainted with the south-western parts of Virginia, near Charlottesville), and Mr. PETERS (one of the best farmers in the State of Pennsylvania, about six miles from this city), to give me their sentiments on the several queries contained in your letter. These you will find inclosed herewith,† in their own words.‡ Mine, and each of theirs, are writ-

\* *Through which channel I recommend any letters you may favor me with, to pass.*

† *At the end of this Letter.*

‡ *On applying to Colonel HAMILTON, for the statement mentioned in Mr. PETERS's letter, he put into my hands, together with the statement, several communications which were made to him last year, by some of the most respectable farmers in this part of the country, in consequence of an application from him, information on certain points respecting farms; and, as they appeared to contain some matters worth attention, I had them copied, and they are also inclosed.*

ten without any previous consultation; and may be considered (my estate in the neighbourhood of which I am best acquainted, lying about midway between theirs) as the opinions of men living north, south, and in the centre of the district, of which an account was given to you in my communications of the 4th of December last.

#### NOTES ON MR. YOUNG'S LETTER.

Paragraph 3. "Is the labour (of negroes, at 9l. sterling) to be commanded in any amount;"—If taken by the year, it may be commanded in any amount, but not if wanted on particular occasions only—as for harvest, for particular dressings of the land. &c.

Par. 4. The labour of a negro Mr. YOUNG reckons cent. per cent. dearer than the labour of England.—To the hirer of a negro man his hire will cost 9l. and his subsistence, clothing, and tools, 6l. making 15l. sterling, or, at the most, it may sometimes be 18l. To the owner of a negro his labour costs as follows: suppose a negro man, of 25 years of age, costs 75l. sterling; he has an equal chance to live 30 years, according to BUFFON'S tables; so that you lose your principal in 30 years—then say,

	£.	s.
Interest of 75l. annually . . . . .	3	15
One thirtieth annually of the principal . . .	2	10
Subsistence, clothes, &c. annually . . . . .	6	0

£. 12. 5

There must be some addition to this, to make the labour equal to that of a white man, as I believe the negro does not perform quite so much work, nor with as much intelligence. But Mr. YOUNG reckons a labouring man in England 8l. and his board 16l. making 24l.

Par. 5. "In the instances of mountain land, the expressions seem to indicate waste land, unbuilt and unclosed."—If Mr. YOUNG, has reference here to the notes which T<sup>H</sup>. J. gave to the President, on the subject of



mountain lands, the following explanation is necessary. The lands therein contemplated, are generally about one half cleared of the timber which grew on them—say all the land of the first quality, and half that of the middling quality : this half is, for the most part, inclosed with rail-fences, which do not last long (except where they are of chesnut), but are easily repaired or renewed. The houses on them, for the use of the farm, are so slight, and of so little worth, that they are thrown into the bargain, without a separate estimate. The same may be said of the farmer's house, unless it be better than common. When it is of considerable value, it adds to the price of the land, but by no means its whole value. With respect to the soil, I saw no upland in England comparable to it. My travels there, were from Dover to London, and on to Birmingham, making excursions of 20 or 30 miles each way. At Edgehill, in Warwickshire, my road led me over a red soil, something like this, as well as I recollect ; but it is too long ago to speak with certainty.

Par. 7. “ That, in America, farmers look to labour much more than to land, is new to me ;”—but it is a most important circumstance. Where land is cheap and rich, and labour dear, the same labour spread in a slighter culture over 100 acres, will produce more profit than if concentrated by the highest degree of cultivation on a small portion of the lands. When the virgin fertility of the soil becomes exhausted, it becomes better to cultivate less, and well ; the only difficulty is, to know at what point of deterioration in the land, the culture should be increased, and in what degree.

Par. 10. “ Can you sell your beef and mutton readily ?”—The market for them, fresh and in quantity, is not certain in Virginia. Beef, well salted, will generally find a market ; but salted mutton is, perhaps, unknown.

Par. 11. “ Mutton dearer than beef.”—Sheep are subject to many diseases, which carry them off in great numbers. In the middle and upper parts of Virginia, they are subject to the wolf, and in all parts of it to dogs : these are great obstacles to their multiplication. In the middle and upper parts of the country, the carcass of the beef is raised on the spontaneous food of the forests, and is delivered to the farmer in good plight in the fall, often fat enough for slaughter ; hence its cheapness. Prob-

bly, however, sheep properly attended to, would be more profitable than cattle, as Mr. YOUNG says—they have not been attended to as they merited.

Par. 13. Mr. YOUNG calculates the employment of 5040l. worth of land, and 1200l. farmers capital, making an aggregate capital of 6240l. in England, which he makes yield five per cent. extra or ten per cent. upon the whole. I will calculate, in the Virginia way, the employment of the same capital, on a supposition of good management, in the manner of the country.

1. Supposing negro labourers to be hired.
2. Supposing them to be bought.

1. Suppose labourers to be hired; one half men, at 18l.; the other half women, at 14l. for labour, subsistence, clothing (I always mean sterling money).

	£.	s.	d.
Interest of 4160l. for 3310 acres of land, at 25s. per acre, . . . . .	208	0	0
——— of $\frac{2080}{240}$ for farmer's capital of stock, tools, &c. . . . .	104	0	0
Taxes, at 7d. the acre (I do not know what they are), . . . . .	96	10	0
Hire of 33 labourers, at 16l. . . . .	528	0	0
	<hr/>		
	£.	936	10 0

*Produce to be sold annually.*

Wheat, 6600 bushels, at 3s. . . . .	£. 990		
Meat, and other articles, at 5l. for each labourer . . . . .	165—	£. 1155	0 0
Net profit over and above the five per cent. above charged, . . . . .		219	10 0
Add annual rise in the value of lands, . . . . .		165	10 0
		<hr/>	

Real profit, over and above the five per cent.

above charged, . . . . . £. 385

which is 6 1-2 per cent. extra, or 11 1-3 per cent. on the whole capital.

2. Suppose labourers to be bought, one half men, and one half women, at 60l. sterling, on an average.

	£.	s.	d.
Interest of 3125l. for 2500 acres of land at 25s. . . . .	156	5	0
— of 1562l. 10s. farmer's capital of stock, utensils, &c. . . . .	78	2	6
— of <sup>1500</sup> <sub>619</sub> for purchase of 25 labourers. . . . .	£. 75		
Subsistence, clothes, &c. . . . .	150—225	0	0
[I allow nothing for losses by death, but, on the contrary, shall presently take credit four per cent. per annum, for their increase over and above keeping up their own numbers.]			
Taxes, at 7d. the acre, . . . . .	72	18	4
	<hr/> £. 532 5 10		

*Produce to be sold annually.*

Wheat, 5000 bushels, at 3s. . . . .	£. 750		
Meat and other articles, at 5l. for each labourer, . . . . .	125—875	0	0
Net profit, over and above the five per cent. above charged (13l. 15s. a head on negroes,) . . . . .	342	15	10*
Add five per cent. annual rise in the value of lands, . . . . .	156	5	0
— four per cent. increase of negroes, more than keeping up original number, . . . . .	60	0	0

Real profit, over and above the five per cent. above charged, . . . . . £. 559 0 10  
which is nine per cent. extra, or 14 per cent. on the whole capital.

In the preceding estimate I have supposed that 200 bushels of wheat may be sold for every labourer employed, which may be thought too high. I know it is too high for common land, and common management; but

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\* 5 1-2 per cent on capital.

I know also, that on good land, and with good management, it has been done, through a considerable neighbourhood, and for many years. On the other hand, I have over-rated the cost of labouring negroes, and I presume the taxes also are over-rated. I have observed, that our families of negroes double in about twenty-five years, which is an increase of the capital invested in them, of four per cent. over and above keeping up the original stock.

I am unable to answer the queries, as to the expence necessary to make an acre of forest land maintain one, two, or three sheep. I began an experiment of that kind in the year 1783, clearing out the under growth, cutting up the fallen wood, but leaving all the good trees. I got through about twenty or thirty acres, and sowed it with white clover, and green sward; and intended to have gone on through a forest of four or five hundred acres. The land was excessively rich, but too steep to be cultivated. In spite of total neglect, during my absence from that time to this, most of it has done well. I did not note how much labour it took to prepare it; but I am sure it was repaid by the fuel it yielded for the family. The richness of the pasture to be thus obtained, will always be proportioned to that of the land. Most of our forests is either middling or poor. Its inclosure with a wood fence costs little, as the wood is on the spot.

18th June, 1792.

(Signed)

TH. JEFFERSON.

*Bucks County, Pennsylvania,  
29th August, 1791.*

DEAR SIR,

YOUR letter of the 13th inst. I received this day week. I have endeavoured to comply with your request in the best manner I was capable, yet not altogether in the way you mentioned. The novelty of the subject, and never having kept any regular account of the annual produce of my lands, nor knowing any person to whom I could apply for such minute information, made it necessary for me to consider the different objects; and taking

to my assistance an intelligent neighbouring farmer, without letting him into the object of my pursuit, we together have formed an estimate, of what may be supposed the average annual product of the different articles raised on the lands here, as you will perceive by the paper herewith transmitted: have added some articles not mentioned by you, and omitted what may be consumed by the family who occupy the farm, not doubting but in that particular, you must be much more competent to judge than I am; have therefore only mentioned what I suppose the average number of persons on a two hundred acres farm.

Although I have not filled the columns in the form you sent me, yet am in hopes you will be able to extract the necessary information, and reduce it into such form as will be most convenient for your purpose.

Happy in an opportunity afforded me, at least to endeavour to serve you, and anxious for the success of every measure which may tend to promote the general interests of our country,

I am, &c. &c.

*To Alex. Hamilton, Esq.*

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*Bucks County, Pennsylvania,*

*Quantity*, 200 acres: *Value*, 3200 dollars.—Two hundred acres being nearly the average quantity of the farms in this quarter, have taken that as the most convenient portion from which to form the required estimates.

*Arable Land*, 125 acres.—The arable land, divided into five fields, of twenty-five acres each, makes in the whole 125 acres.

*Pasture*, 50 acres.—The course of cropping pursued here requiring three fields to be under tillage, two of course will be left for pasture, which make 50 acres.

*Orchard, &c.* 10 acres—Orchard, garden, house, and barn, yards, lanes, &c. ; supposed to occupy 10 acres

*Meadow*, 15 acres.—The natural meadows in this part of the country being few, yet as every farmer finds means for allotting some portion of his land for that use, suppose the nearest average 15 acres.

*Woodland*, 50 acres.—Timber being an article indis-

pensably necessary for fuel, fencing, building, &c. have allowed 50 acres for that use.

*Wheat*, 200 bushels, at 90 cents\* per bushel, is 180 dollars.—One of the aforesaid fields is allotted, in rotation, for wheat and rye ; suppose twenty thereof to be sown with wheat, will yield, *communibus annis*, ten bushels per acre ; for although in seasons, on well improved grounds, twenty, thirty, and even thirty-five bushels may be produced from the acre ; yet from the many casualties to which land tillage is exposed, so that in some seasons the best improved ground may not produce even five bushels ; have, from my own observation, and that of an intelligent neighbouring farmer, taken the above as the nearest supposed medium, making two hundred bushels ; which, at 90 cents per bushel, is 180 dollars.

*Rye*, 50 bushels, at 60 cents per bushel, 30 dollars.—Rye likewise, ten bushels to the acre ; the remainder of the field, being five acres, will yield fifty bushels, which, at sixty cents per bushel, make 30 dollars.—N. B. The field on which the wheat and rye is sowed, is, generally, also put in with grass, and lays for pasture two years.

*Corn*, 300 bushels, at 40 cents, 120 dollars.—One field is generally allotted to Indian corn and buck-wheat, in the same proportion with wheat and rye ; the 20 acres of corn will average 15 bushels per acre, making in the whole 300 bushels, at 40 cents per bushel, is 120 dollars.

*Buck-wheat*, 75 bushels, at 30 cents, is 22 dollars, and 50 cents.—This grain is so precarious in its growth, that it is extremely difficult to form an estimate of its general produce ; but suppose 15 bushels per acre, which, from five acres, being the remainder of that field occupied by the corn, will be 75 bushels, valued at 30 cents per bushel, is 22 dollars, 50 cents.

*Barley*.—So little of this grain is raised here, that I did not think it worth notice.

*Oats*, 100 bushels, at 20 cents per bushel, 20 dollars.—By the course of cropping commonly used here, this grain is sowed, for the sake of ease and convenience to the farmer, upon some part of the fallow intended for wheat, to which it generally proves injurious, therefore is not largely pro-

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\* One hundred cents make a dollar.

pagated: have only allotted five acres, which will average twenty bushels per acre, making in the whole 100 bushels, at 20 cents per bushel, is 20 dollars.

*Flax and Seed*, 30 dollars.—This is also generally raised on part of the fallow; suppose two, which, on an average, may yield 250 pounds of swingled flax, and 12 bushels of seed, which, both together, may be worth 30 dollars.

*Apples and Cyder*, 30 dollars.—Every farm has more or less of orcharding; eight acres allowed for that use, the product whereof, in apples and cyder cannot be worth less than 30 dollars.

*Hay*, 20 tons: *Value*, 120 dollars.—Although 15 acres only are allotted for meadow, which, probably, on an average, will not yield more than that number of tons, yet as the farmers, by sowing grass-seeds on their lands, improved with dung, plaster of Paris, &c. annually mow more or less of those, I have allowed 20 tons, worth six dollars each, makes 120 dollars.

*Cattle*, annual product, 70 dollars.—I suppose a farm of 200 acres will, on an average, support 12 head of cattle; of those, I suppose five milch cows, which will each yield per annum, one calf, two of them to be raised and three fatted; the latter worth six dollars. Five milch cows will produce fifteen pounds of butter per month, each, for seven months, which makes in the whole 525lbs. at nine cents per lb. makes 47 dollars, 25 cents; five months allowed for their being farrow, or fattening the calves. Two calves annually raised, affords opportunity for disposing of that number of cattle annually either in beef or milch cows, which, being worth 16 dollars each, makes 32 dollars; making in the whole 79 dollars, 25 cents. Deduct, for accidents, &c. nine dollars, 25 cents leaves an annual product of 70 dollars.

*Horses*.—Whatever these may produce, must be considered as included in the general product of the farm, for the cultivation of which they are made by the propagation of the animal, unless it be in the most interior parts of the country, where no market can be procured for grain, &c.

*Sheep*, annual product, 28 dollars.—Twenty store sheep may be conveniently kept on a 200 acres farm; their wool

will average 40 pounds per year, worth 23 cents per pound, which makes 10 dollars ; their increase in lambs, twelve ; this number being to be disposed of annually, either in lambs or fatted mutton, they may be worth 11-3 dollars each ; makes 18 dollars. Thus the whole annual product on sheep will be 28 dollars.

*Hogs*, annual product, 80 dollars.—Ten hogs may be considered as the average number raised annually on a 200 acre farm ; weighing 200 net pounds each, making 2000lbs. at four cents per lb. ; the value of the annual product will be 80 dollars.

*Poultry*, annual product, 10 dollars.—Suppose, on an average, ten dozen may be raised, worth one dollar per dozen ; their product will be 10 dollars.

*Wood consumed in fuel*, 25 cords.—Allowing one kitchen fire, which burns more or less the whole year, and one other fire during the winter, for the convenience of the family ; I suppose the two fires will consume 25 cords.

Consumed by cattle, horses, sheep, hogs and poultry :

Indian corn, 200 bushels ; rye, 25 ditto ; buck-wheat, 40 ditto ; potatoes, 75 ditto ; hay 20 tons.

The family consumption may be estimated by what will support nine persons, viz. the man, his wife, and three children ; one man hired by the year, one bound boy, and one girl ; the extra hiring of hands in harvest, and hay-making ; spinsters, visitors, &c. equal to the maintenance of one person more during the year.

Tax paid annually for defraying the expences of the country, supporting the poor, and repairing the roads, will average about eight dollars.

*Pittsburgh, October 27, 1791.*

SIR,

HEREWITH I return your form, filled as well as I am able at present. I beg leave to mention, that in a new country like this, where farming is not reduced to system, it is difficult to form an estimate as you wish. Our farms are generally new ; the oldest not exceeding 20 years.



In order to give you as good an idea as possible, I have divided them into three classes, annexing the just value of each class; and have averaged the product. I believe this rule would apply as equally here as any other. I have extended my inquiries to two or three different farms of each class.

Should the method which I have adopted, not answer your intention, or be too inexplicit, I will, with the greatest pleasure, make any further inquiries that you may think necessary,

I have the Honor to be, Sir,

With much respect,

Your obedient humble servant,

(Signed)

To Alexander Hamilton, Esq.

<i>Value of Farm.</i>	<i>Kinds of Land.</i>
Lands divided into three classes.	Arable land, . . 47 acres
First class, at 25s. per acre	Pasture land, . . 10 —
Second — at 15s. —	Meadow, . . . 7 —
Third — at 10s. —	Woodland, . . . 250 —
Averaged value, . 16s. 8d.	

<i>Annual Product.</i>	<i>Quantity consumed by Cattle and Poultry.</i>	<i>Prices.</i>
		<i>s. d.</i>
Wheat, . . . 150 bushels.	— bushels	3 9 bushel
Rye, . . . . 150 —	30 —	2 6 —
Corn, . . . . 250 —	200 —	2 0 —
Oats, . . . . 160 —	60 —	1 6 —
Barley, . . . 50 —	— —	3 9 —
Buck-wheat, . 50 —	— —	1 6 —
Potatoes, . . 200 —	160 —	1 10 —
Other roots and vegetables,* in value	— —	— —
Black cattle, . . 4	— —	— —
Horses, . . . . 2	— —	— —
Sheep, . . . . 6	— —	— —

\* Considerable quantities of pumpkins, turnips, &c. whose value I cannot ascertain.

Hogs, . . . . . 15	—	—
Poultry, . . . . . 6 dozen.	—	—
Tobacco, a small quantity in own consumption.	—	—
Cords of wood, consumed in fuel—without number.	—	—
Hay, . . . . . 8 tons.	6 tons.	50 0 ton.

*Wye, (on the Eastern Shore of Maryland),  
November 11, 1791.*

DEAR SIR,

THE method in which I proceeded on the inquiry was this : in conversations with farmers, I expressed a wish to be informed of several particulars in rural concerns, that seemed to me to have been too little thought of by husbandmen. On explaining my meaning, they approved of the design, and promised to recollect what they could of those matters, and that they would communicate the result to me. Having thus prepared them, I some time after delivered to them printed papers, containing the particulars of my inquiries, and requested they would fill up the blanks in those papers. The last step was to wait on them at their houses.

The information contained in the paper which I have now the honor to deliver to you, is all that could be obtained. The farmers received the papers with hearty intentions to fill up the blanks, without conceiving there was any difficulty in the execution ; yet the only reason of there not being other answers to the questions, is solely from the difficulty, to them the impossibility, of fulfilling their design and promise ; for they kept no minutes, and their attention to the bulk of the articles, as they acknowledged with concern, had been trifling. On this occasion I had the pleasure to hear several of the farmers declare, that being, by the inquiry, led to think on the numerous particulars in the paper, they had determined, in future, to make some account of them, as they conceive it will be considerably advantageous to them.

The little introduction to the piece was meant to soften

it, from an appearance it might have of an inventory of their effects ; and I think that if the value of the things, especially of the land, can be omitted, the quantities would be more readily, if not also in more numerous instances, obtained ; and there would be less danger of a jealousy, that the inquiry is meant for political purposes. In one instance only, there appeared a suspicion that such a use was intended. It was in the last conversation I had on the subject with some farming gentlemen. " It may be said, by some people, that Mr. B. is a politician, and that he wants to know the value of country estates, that they may be taxed."

The value of lands, as reported by the proprietors, probably is less to be depended on, than if it was collected from conversations with people from the several States. Ask any man what his land would sell for, or is worth, he cannot find a moderate rate. The land, in the present case, is fully worth the sum it is rated at ; but yet, in my opinion, it could not now be sold, on time, for that price.

No article is so slow of sale as land, at this time.

I have the Honor to be, &c.

*The Hon. Mr. Hamilton.*

The following account is of a farm in Talbot county (State of Maryland), of *middling* goodness, with the *medium* produce of its last four years crops. It contains about 450 acres, of which 180 are woodland, 270 arable, and of this 110 are pasture. The value of the whole, as it might be expected to sell on time, according to present opinion, is 2500*l*.\* (562*l*, at 4*s*. 6*d*.)

Its produce, in common, the medium of four years, follows :

	Quantity.	Value.
Wheat	700 —	£.263 0
Rye	— —	0 0
Corn	450 —	67 0
Oats	— —	0 0
Barley	— —	0 0
Buck-wheat	— —	0 0

\* The same as Pennsylvania money, dollar being 7*s*. 6*d*.

	Quantity.	Value.
Potatoes, with fruit, other roots, and vegetables, in value	— —	50 0
Tobacco	5000 —	50 0
Wood for fuel (cords)	160 —	20 0
Hay (tons)	5 —	25 0
Pulse (peas, &c.)	— —	0 0
Hemp	20 —	0 10
Flax	100 —	2 10
Wool	200 —	10 0
Butter	400 —	£.20 0
Cotton, cheese, fruit	— —	0 0
Cattle 35, annually raised	— —	120 0
Horses 25, colts do do	— —	250 0
Sheep 80, lambs do do	— —	75 0
Hogs, annually killed or sold	— —	60 0
Poultry per year, dunghill	400 —	0 0
Turkies 100, ducks 90.		

The quantities and values are generally in round numbers, which has a suspicious appearance. But the worthy farmers, after considering well each article, stated them partly from memory, partly from notes, or scraps of paper, and thought it best to omit fractional quantities and sums, as he had not perfect minutes. It is the account of an honest candid man, who would not have given it if he had not believed it to be generally just.

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MR. PETERS TO COL. HAMILTON.

*Belmont (within six miles of Philadelphia).*

*27th August, 1791.*

DEAR SIR,

I SEND you the best answers to your inquiries on the agricultural subject, I can at present think of. I thought it best to draw it up in the form of an account, though I have filled up the columns you sent me. The manner I have pursued, will furnish you with every thing you require, though much of it may be useless to you, and inapplicable, perhaps, to your immediate object. You will perceive the miserable state of agriculture in the part of

the county I live in. It is bad enough every where, but the fertility of soil in lands recently cleared, or naturally better, and readier access to manure, give advantages to farmers more happily seated. The account will explain the principles I went on, and, lest my calculation should be too conjectural, I took four similar farms I well knew, which are situated not far from each other, but far enough to give a general view of the state of the country. I consulted the most intelligent of their owners, men who happen to be the best informed on the subject of any of my neighbours. I averaged the actual produce in a year, the best of four years' cultivation, in all of them. So that this, added to my own experience, convinces me that I am not far wrong in any particular. I omitted my own farm, because it far exceeds the common produce of others; and though my expences are greater, they are amply compensated by the difference of product; in all instances double, in many treble, and in some quadruple. Yet, with all this, I find farming but a bad trade, when capital is calculated upon. There are few men of any talents, who cannot employ themselves in any other business to greater advantage. When I consider the actual profit of a farm, I am more astonished at the injustice and folly of those who have burdened the land with such heavy impositions. It is true, farmers are never on velvet, for they pay their share of imperceptible taxes. Yet these taxes are also borne by those whose property is latent, and cannot therefore be directly touched; and the owners of this kind of property are frequently the greatest consumers. But it is useless to trouble you with such observations. Nor will it be of service to enter into speculations, many of which are confirmed by successful experience, to shew how the agriculture of this country may be improved. These improvements depend not *directly* on Government; *ultimately* they have no inconsiderable relation to it: but farmers can only come in for their share of beneficial effects, flowing from good general systems. I can truly say, they ought to hope every thing in this view of the subject; and I am happy to be convinced that the spirit of improvement is rising rapidly among them. It has been a point of patriotism with me for many years past, to promote this spirit, and having set out with

moderate expectations, I have not been without some gratifications.

I am, &c.

(Signed)

R. PETERS.

A. Hamilton, Esq.

## D<sup>R</sup>. FARM.

	£.	s.	d.
To annual interest on capital, 200 acres, at 8l. per acre, 1600l. at 6 per cent.	96	0	0
<i>Stock and Implements.</i>			
4 horses, at 15l. each,	£.60		
8 cows*, at 6l. each	48		
Cart, waggon, ploughs, harness, geers, &c.	60		
12 swine,	12		
	£.180		
On the above 180l. I only charge 6 per cent.	10	16	0
	£.106	16	0
Though the annual loss in some articles is 20 per cent. and in none less than 10, decrease in value by age in horses and cattle, accidents, wear and tear, are the causes, yet I have made no account of annual losses by wear of buildings, or accidents to stock.			
<i>Annual Expenditures</i> , beside the personal labour of the farmer and family, and the produce and cash used for their support.			
One hired man and his maintenance,	37	10	0
Extra wages at hay and harvest, and expences,	10	0	0

\* The farms I selected, keep, on an average, 16 horned cattle, 4 horses, 12 sheep and 12 swine.

	£.	s.	d.	
Days hire for occasional business,	5	0	0	
Smith's bill, - - - - -	3	0	0	
All the hay consumed by stock, -	90	0	0	
Rye, 30 bushels, at 4s. 6d. -	6	15	0	
Indian corn, 100 bushels, at 3s. -	15	0	0	
Buck-wheat, 100 bushels, at 2s. 6d. -	12	10	0	
Potatoes, 80 bushels, at 1s. 6d. -	6	0	0	
Firewood, 20 cords, at 5s. - - -	5	0	0	
Seed—Wheat, 15 bushels, at 7s. 6d. -				
Rye, 5 bushels, at 4s. 6d. -	6	15	0	
Potatoes, 10 bushels, at 1s. 6d. -	0	18	0	
Indian corn and buck-wheat, -	1	10	0	
				199 16 0
Direct taxes of various descriptions have in some years been 20l. now perhaps, -				15 0 0
				<u>£.321 12 0</u>

CONTRA C<sup>r</sup>.

	£.	s.	d.
By 130 bushels wheat, at 7s. 6d. -	48	15	0
50 ——— rye, at 4s. 6d. -	11	5	0
180 ——— Indian corn, at 3s. -	27	0	0
30 ——— oats, at 2s. 6d. -	3	15	0
175 ——— buck-wheat, at 2s. 6d. -	21	17	6
100 ——— potatoes, 1s. 6d. -	7	10	0
Roots and other vegetables, -	6	0	0
	<u>£.126</u>	<u>2</u>	<u>6</u>
Two cattle raised annually, -	4	0	0
One horse, worth 15l. at 3 years old - - - - -	5	0	0
Eight lambs, at 10s. each, -	4	0	0
Wool of 12 sheep, 36lb. at 2s. -	3	12	0
Pork, 1400lb. at 3d. -	17	10	0
Poultry, in value - - - - -	3	0	0
Hay, 30 tons, at 3l. -	90	0	0

*Dairy.*

Eight cows,

Six calves, at 20s. each £.6 0 0 £. s. d.  
 (Men fallow, 2 calves  
 raised)

Butter\*, 832lb. at 1s.

3d. - - - 52 0 0

Cheese, 100lb. at 6d. 2 10 0

60 10 0

As to offal, milk, &c. except a small  
 part for the family, it is consumed  
 by the calves and pigs, and ac-  
 counted in their value.

Flax, 150lb. at 7d. £.4 7 6

Deduct 1-2 for expences  
 of breaking and hack-  
 ling, - - - 2 3 9

2 3 9

Add 4 bushels seed, at  
 5s. - - - 1 0 0

8 3 9

Balance against farm,

£.316 18 3

4 13 9

£.321 12 0

*N. B.*—About eight bushels of wheat per acre, is a full allowance for the better kind of farms in these parts. Some do not yield six ; and eight out of ten do not come up to eight bushels per acre. The farms I have selected sow from 16 to 20 acres, winter grain. The average of active crops is, however, less than eight bushels to the acre.

\* Take accidents, and the proportion of cows in milk, to those not so, 2lb. of butter per week, is the average through the year.



## VALUE OF FARM.

Two hundred acres, at 1600l. Pennsylvania currency.

<i>Kinds of Land.</i>	<i>Annual Product.</i>
Arable & pasture, 152 acres,	Cattle, increase, - 2
Meadow, - 18 ———	Horses, ——— - 1
Woodland, - 30 ———	Sheep, ——— - 8
<i>Annual Product.</i>	Hogs (weight), 1400lb.
Wheat, - 130 bshls.	Poultry, in value, 3l.
Rye, - 50 ———	Tobacco, ———
Oats, - 30 ———	Cords of wood, consumed
Indian corn, - 180 ———	for fuel - - - - 20
Barley, - ——— ———	Hay (tons), - - - - 30
Buck-wheat, - 175 ———	Dairy (butter & calves,
Potatoes, - 100 ———	6 calves), - - - 700
Other roots and vegetables,	Flax, 150lb.
in value, 6l.	

*Belmont, (6 miles from Philadelphia), June 20, 1792.*

SIR,

I SHALL be happy if I can assist in solving Mr. YOUNG's queries; but the time will not admit either of accuracy, or the combinations necessary to form the average of labour, building, or improvement, applicable to the State at large. From Mr. YOUNG's calculations, formed, I presume, upon communications from you, I am surprized to find that the prices of labour, and quantity of product, are, in a great degree, similar to those of this State, though you seem to have confined yourself to Virginia and Maryland. I mean the labour and wages of hirelings; for as to slaves I have but a very imperfect, and you a perfect knowledge, of what concerns their value, expence and labour.

1st. Our wages for hirelings, by the day, are commonly 2s.\* in winter, and 2s. 6d. nine months in the year, for common days-work on a farm, and every thing found, as to eating and drinking. The same man will hire, and find

\* Here and throughout, estimate the dollar at 7s. 6d.

himself, at 3s. and 3s. 6d. per day ; for a reaper 3s. to 3s. 9d. and found ; and the same for cutting grass ; reaping, by the acre, I have never had done under 5s. but the price generally 7s. 6d. the labourers finding themselves. Neither reaper nor mower will, on an average, do more than three-fourths of an acre. Mowers, per-day, are allowed here a pint of rum, or other spirits—a vile and unnecessary practice. Reapers have as much as they choose, perhaps three half-pints per day ; but this practice is yearly diminishing. When I say that a reaper or mower will do three-fourths of an acre, I mean of a common crop ; for in heavy grain, or grass, such as a good English crop, no labourer here will reap or mow above half an acre. As to mowing, or what we call cradling grain, we pay a man 5s. to 6s. per day, and found ; and the day's work about the same with Mr. YOUNG's statement, viz. two or two acres and a half per day. Mowing per acre 5s. to 6s. and a pint of rum. Labourers find themselves food.

2d. The hire of a waggon, four horses, and driver, from 15s. to 20s. per day.

3d. The yearly hire of a good labourer in Pennsylvania I think 60 dollars, or 22l. 10. currency, and found, clothing excepted.

4th. As to the quantum of labour to be commanded for pay, I know not how to answer. Many who have small farms, either on rent, or their own property, can spare a portion of their time to assist their neighbours for hire. The class of people merely labourers is not very numerous, and by no means stationary or collected. The independent situation they can place themselves in, by removing to the frontiers, is the cause of the scarcity of labourers in the settled parts of the State. Nor is the demand so regular as to detain unconnected labourers in any spot. Whether the considerable improvements we are about undertaking, by roads and canals, will operate so as to attract labourers from other States, or from Europe, in hopes of constant employment, is yet problematical. If these works employ none but our own people, the price will increase on the farmers.

There is no doubt but that the rates of labour are, and will, for a long time, continue to be higher than they are in England. Our people live better than those of the

same rank in life in any part of the world. The employer pays for the habits of the hireling, who not only eats and drinks well, when provided for, in addition to his wages, but out of his wages must (if he has one) provide for his family, according to the custom of the country. Even an English labourer, who lives better than one in any part of Europe, would be astonished at the fare of one in America. I do not believe Mr. YOUNG much mistaken, when he says that the rate is, comparatively, 100 per cent. higher than in England, and the habits of living are as much the cause of it, as the easiness of the passage over the mountains. I am not displeased, as a citizen, at this circumstance, though, as a farmer, it is against my profit. Some things might be retrenched, but I am happy when I know that our common people are better fed and clothed than in any other part of the world.

5th. The prices of lands are so extremely various, that there is no fixing an average. The situation and improvement always add to value. Knowing so little as our farmers do, of the means of renovating lands, the longer they are cleared the less valuable, for the most part, they are. I gave to Colonel HAMILTON, an exact account of the debtor and creditor of four farms, in my neighbourhood, taken from the knowledge I have of the general circumstances of this part of the country. The result is very unfavourable to the characters of our farmers. Be pleased to ask Colonel HAMILTON for it, as I have not a copy. I believe Colonel HAMILTON, who in some project he had, sent for information to all quarters, could most easily give satisfaction in this point. Mr. YOUNG does not know that, in parts where there are no slaves, the farmer and his family do the greater portion of the work of their farms within themselves. This is the reason why they can get forward and live well. If calculations were made of every thing being hired, few farms in Pennsylvania would clear a farthing. A man here saves money by a crop of 10 bushels, and in England he would perish under it. There he rents and hires—here, for the most part, the farm is his own, and he hires little, or none at all.

The products of wheat can be all sold.

Barley not in great quantities ; our people not being as fond as they ought to be of beer.

Rye may increase in demand by domestic distillation ; at present it is no great object.

Butter, fluctuating, but all may be sold now produced.

Beef, a good article ; and, when we know better how to cure it for exportation will increase in demand.

Mutton, no sale for any great quantities. For some time hence this will not be a great sheep country ; the dryness of our seasons burns up the pasture for a great part of the year ; we keep too many dogs, who destroy them ; and our country is much intersected with mountains, inhabited by wolves, which cannot be extirpated. It is a profitable article, so far as you can extend it, but no great capital can be employed in it ; and, if the business was more extensively carried on, the profit would be reduced to nothing. Our long winters are inimical to sheep ; they render the keeping expensive, and subject the animal to numberless disorders. We can have no succulent or green forage—turnips are out of the question ; our snows and severe weather destroy or cover them ; nor is their culture certain. I have tried the English sheep, which soon degenerate, and stand the climate but badly. —As to fleece, it is but scant, 3lbs. per sheep being rather an over calculation. Wool is now in some demand, but I have known it unsaleable. I hope manufactures will continue to increase the demand ; but the prospect of this is distant. Mr. YOUNG's calculation upon waste land, might be well enough, if the circumstances before stated, as to sheep, did not forbid our going extensively into them. Sheep have most enemies where there could be most range for them ; and they require care as well as range. I know none who have tried the sheep business that have succeeded. Folding is very well, but it requires labour ; and the seep, crowded together here, have often perished. I cannot ascertain how many an acre will support ; for none are kept, within my knowledge, but in small numbers, and as a variety in a farmer's stock. They are close feeders, and destroy pasture prodigiously.\*

Excuse me, Sir, for this hasty and imperfect sketch ; I should have gone more deeply into the subject had the time you allot permitted.

Unless one could find, as it is in England, the business

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\* *This idea shews how little they know of sheep.*—A. Y.

carried on in different branches, systematically, it is difficult to make calculations, or even observations, generally applicable. Few people here do all their business by hiring, and some scarcely hire at all.

The race of tenantry is miserable indeed.

I am, with the greatest respect,

Your obedient servant,

RICHARD PETERS.

*P. S.* Should you think of any particular point, and would be pleased to mention it, I will pay particular attention to it. Mr. YOUNG's letter would require a very extended discussion.

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*Philadelphia Oct. 20, 1792.*

SIR,

I MUST beg your acceptance of my best thanks for the book that accompanied your polite letter of the 9th of June, which came duly to my hands.

I presume you have long before this received my letter, which was committed to the care of Mr. PINCKNEY, our Minister at the Court of Great Britain, and shall be very glad if the contents of it afforded you the information which it was intended to communicate ; for I am persuaded, that I need not repeat to you, how sincerely I wish success to those laudable exertions which you are making, to promote the important interest of agriculture, and the cause of humanity.

With very great esteem, I am, Sir,

Your most obedient servant,

G. WASHINGTON.

*Arthur Young, Esq.*

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*Philadelphia, Dec. 2, 1792.*

SIR,

I MUST begin this letter with an apology—no apology ought to be so satisfactory as the truth—and the truth is,

that not receiving the account of the taxes of a Virginia estate, for which I had written (before I left this city, during the recess of Congress), as mentioned in my letter to you of the 18th of June, the promise I then made of forwarding it to you in my next, had escaped me altogether, until I was reminded of it lately, by a circumstance too trivial to mention.

A copy of the account is now annexed. The name of the proprietor of the estate is not inserted, but on the authenticity of it you may rely. That you may understand the principles on which the land-tax in Virginia is founded, it will be necessary to inform you, that by a law of that State, the inhabitants of it are thrown into districts—say parishes; in each of which, or for two, or more of them united, commissioners are appointed to assess the value of each man's land, that lies within it; on which a certain per centum is uniformly paid.

No negroes under twelve years of age are taxed, nor are any under sixteen subjected to the payment of county or parish levies. Horses, at present, are the only species of stock in that States which pays a tax. Carriages were, when I left Virginia, and I believe still are, subject to a tax by the wheel. It was then, if I recollect rightly, about five dollars each wheel; but whether it is more or less now, or whether there be any at all, is more than I am able with certainty to inform you.

With very great esteem and regard,

I am, Sir, your most obedient,

And much obliged servant,

G. WASHINGTON.

*Arthur Young, Esq.*

**D<sup>R</sup>. FOR PUBLIC TAXES—FOR COUNTY AND PARISH  
LEVIES.**

In Truro Parish, 1792.		£.	s.	d.
Tax on 6320 acres of land, for 1791	- - -	13	8	7
—— 114 negroes, at 2s. 6d.	- - -	14	5	0
—— 87 horses at 6d.	- - -	2	3	6
—— 107 county and parish levies, at - -	- - -			
29lbs. of tobacco each,	3013			
Fairfax Parish (adjoining).				
Tax on 3420 acres of land	- - -	6	6	8

		£.	s.	d.
Tax on	24 negroes, at 2s. 6d.	-	-	-
-----	15 horses, at 6d.	-	-	-
-----	23 county and parish levies,			
	at 29lbs. of tobacco each	567		
		3670, & £.	39	10
3670lbs. tobacco, at 15s. per cwt.	-	-	-	-
			27	10
Total—(Dollars, at 6s.)		£.	67	1
			4	

*Note.*—There ought to have been in the above account, a discrimination in the charge for county and parish levies.—The first is for building and repairing court-houses, gaols, &c. criminal processes, &c. the latter is for the support of the poor, and other parochial charges.

#### EXTRACTS FROM SOME REMARKS SENT TO GENERAL WASHINGTON ON THE PRECEDING ACCOUNTS.

A reaper, 3s. to 3s. 9d. a day, and does three-fourths of an acre ; say 2s. 2d. sterling, and board, which, with us, is called 16l. If a farmer boards his men with his bailiff, he pays in that proportion : this is 10d. 1-2 a day ; but the better fare of harvest will make it at last 1s. 6d. or 3s. 8d. for three-fourths of an acre—4s. 10d. 1-2 per acre. We have no part of England in which this is done so cheaply. It rises from 5s. to 20s. per acre ; with you, the same expence mows an acre, viz. 3s. 8d. This, on the contrary, is dearer than with us, if for grass ; and, for corn, a man mows two or two and a half acres a day.

The next minute is a waggon, four horses, and (I suppose a man) 15s. or 10s. sterling. This is nearly the price with us all the year, except in very busy seasons, when not to be had at all.

In Maryland, wages 20l. and all found but clothes ; sterling, 12l. ;—with us, the head man 10l. ; the rest 8l.

On the Fluvanna and Rivanna, a negro 9l. and every thing found : and in a former letter, *all labour with slaves*. Hence quere—Is the labour noted in these minutes, accidental, and not to be commanded in any amount ; or is

it the standard employment of the State? Reckoning a negro at 50l. and estimating his life in any ratio, he must surely be cent. per cent. dearer than the labour of England. Governor GLEN, in his description of South Carolina (one of the best accounts of a country I have met with), says, that a slave can manage two acres of indigo, or six of Indian corn: this must be less than the half of what our labourers do, who will set out, and clean effectually half an acre of turnips every day, for the first hoeing; and from three-fourths to one acre the second.

I see no reason to calculate it less than 100 per cent. higher than in England; and the general information I have at various times had from other persons, seems to confirm the idea: no wonder, while every man, by going over the mountains, can have land for himself.

The next difficulty is in respect of the purchase of land, which in the notes is every where *per acre*, very properly (I suppose the statute English acre, or it would have been mentioned to the contrary); but it is not mentioned what State the lands are in, which are thus valued: whether additions to properties already built and improved, or the improvements themselves, including the buildings, fences, &c. In the instances of mountain-land, the expressions seems to indicate waste land, unbuilt, and uninclosed: The prices converted to sterling, appear to be nearly as follows:

<i>Above 40s.</i>		<i>Below 40s.</i>	
£.10	0 0	£.1	1 0
4	1 0		0 15 0
2	8 0		0 9 0
3	0 0		0 16 0
4	16 0		1 16 0
2	2 0		0 15 6
3	15 0		1 11 0
3	2 0		0 15 6
2	4 0		1 2 0
3	0 0		1 2 6
			1 17 6
10)	£.38 8 0		1 11 0
			1 2 0
Average,	3 16 9		1 2 6



Above 40s.	Below 40s.
1 2 2	1 7 6
2)4 18 11	0 14 0
Gen. aver. £.2 9 5	0 19 0
	17)£.18 17 0
	Aver. £.1 2 2

Which may be thus contrasted with Suffolk, the rent of which is, on an average, nearly that of England. Rent 12s. an acre, at 28 years purchase, or 16l. 16s.

It is impossible to compare the soils without seeing them; but from various circumstances touched on in the letters, I am inclined to think American land as good as ours in Suffolk *at least*. The spontaneous growth of white clover is, with us, a sure criterion of good land; we have none of it in Suffolk, or at least very little: when our land is worn out by bad management, and left, it runs to what is called water-grass, the *Agrostis stolonifera* one of the worst seeds any country can be plagued with. American products, it is true, are shocking, and mark a management which, thank God, we know nothing of. Such crops would not be found in any part of this kingdom. The observation, that in America farmers look to labour much more than to land, is new to me; but it is a calculation which I cannot understand, for, exactly in proportion to the dearness of labour, is the necessity of having good crops: a bad one, in every thing but threshing, costs as much in labour as a good one. Good crops are not gained by operose systems so well, or so surely, as by reposing the soil under grass, and supporting great stocks of cattle and sheep. Such products as you describe, with dear labour, are absolutely inexplicable. A very severe mildew has been known to damage wheat so much in England, that the crop, being calculated at seven or eight bushels an acre, in cheap times, has been mown and carted to the farm-yard for the hogs to eat it, and make dung. With so small a crop the quality is sure to be bad, if the soil is *naturally* good.

I have stated the price of land in Suffolk at 16l. 16s.; but this price includes buildings and improvements; for instance, suppose 300 acres in one farm.

House	-	-	-	-	-	£.600
Barns	-	-	-	-	-	500
Stable	-	-	-	-	-	200
Cow-house	-	-	-	-	-	100
Styes, &c.	-	-	-	-	-	50
Cart-lodge	-	-	-	-	-	50
Gates and fences, and road	-	-	-	-	-	370

---

£.1870

This, I believe moderate ; however, let us call it only 6l. per acre, 1800l. it reduces the price of land to 10l. 16s. There are various improvements besides, such as irrigation, marling, draining ; but we will drop them at present.

It should seem that in Virginia taxes may be calculated in this manner, perhaps not with accuracy.

	s.	d.
7s. 6d. on 100l. suppose 50 acres ; this is about	0	2
Negro tax may be	-	0 1
Horse tax, 6d.	-	0 0 1-2
Parish, and county levies 7s. 6d. a head, 20		
would be 7l. 10s. perhaps per acre	-	0 6
		currency
per acre—sterling say	-	0 7

The price of products contrasted with Suffolk :

	America.		Suffolk.	
	s.	d.	s.	d.
Wheat per bushel, average	3	0	—	5 0
Rye	1	9	—	3 0
Barley	1	10	—	2 6
Butter	0	5 1-2	—	0 8 1-2
Beef	0	2 1-4	—	0 4 1-2
Butter	0	3 1-4	—	0 5
	<hr/>		<hr/>	
	7	6		11 0
	<hr/>		<hr/>	

By means of the enormous demand of London, the three cattle products may be sold in any quantities produced, without the least apprehension of wanting a market, and those of corn at these rates also. If 500 stone of beef on a farm at 2 1-4 is made 10,000 stone, can you

sell it readily? the West Indies considered, this is probably the case. - Mutton is an article of infinitely greater importance, and that not being barrelled, probably could not be sold.

You have the unaccountable circumstance, I see, as well as England, of mutton being dearer than beef: horses, not oxen, being almost universal with us, makes it yet more strange. I know, from experiments made with considerable care, that if they were at the same price, the farmer would have more profit by producing mutton than by producing beef; yet is mutton by many per cent. higher priced! but sheep give you another profit in their wool, and a third in their fold. The former with us is infamously depressed in price, but not in America, for your wool at 1s. per lb. is 33 per cent. higher than it would sell for in England. Why then surely you should raise those products that sell well? and wool sells better (of course in any quantity) than any thing else you have. With mutton at 3d. per lb. and wool at 1s. there can be no comparison between sheep and any other application of land. But there must be a market for mutton; and to effect that, you should get **BAKEWELL's** breed, which fatten so readily on very good land, that a common application of it is salting, to use instead of bacon. The provincial assemblies of France have employed smugglers to get (badly chosen) English sheep. Half the Kings in Europe have done the same, to get Spanish sheep: both very wisely; I hope your American assemblies will be equally wise, and take care that the food produced in the State is applied to the breeds that will pay best for it.

We may thus compare England and America, supposing 300 acres bought and farmed by the purchaser:

ENGLAND.		£.	s.	d.
Produce of 300 acres, 5 rents, at 12s. or 3l.		900	0	0
<i>Deduct:</i>				
Land-tax 3s. in the pound, at a	£.	s.	d.	
4s. cess on 180l.	-	-	27	0 0
Rates 4s. 6d.	-	-	40	10 0
Tithe 4s. 6d.*	-	-	40	10 0

\* On an average this would be too low; and if gathered it would be 90l.

	£.	s.	d.	£.	s.	d.
Roads - - - -	3	10	0			
Assessed Taxes - -	3	0	0			
	<hr/>			114	10	0
				<hr/>		
				£.	785	10 0

*Deduct further :*

Labour - - - -	150	0	0			
Interest of 5040l. at 5 per cent.	252	0	0			
Int. 1200l. farmer's capital -	60	0	0			
	<hr/>			462	0	0

Nett - - - - - £.323 10 0  
5l. 3s. per cent. on 6240l.

Repairs supposed the same with both, and therefore omitted. But *quere*, Mr. JEFFERSON's Virginia, p. 258, where he says they are built so badly as to last only 50 years : ours last 150 years of wood, and much longer if of brick.

#### AMERICA.

	£.	s.	d.
Produce of 300 acres, supposed the same as in England, but the price as 7 1-2 to 11	613	0	0
<i>Deduct :</i>			
Taxes 7d. per acre - - -	8	15	0
Labour at cent. per cent. higher than England - - -	300	0	0
Interest of 1051l. at 5 per cent. the purchase of 300 acres at 3l. 16s. 9d. - - -	52	11	0
Interest of 900l. farmer's capital, at 3l. per acre, or 20s. less than England - - -	45	0	0
	<hr/>		
	406	6	0
	<hr/>		
Nett - - - - -	£.	206	14 0

10l. 11s. per cent. on 1951l.

*Quere*—if labour should be reckoned so high as 300l. But note, that the actual labour in America *in amount* must not be regarded, unless, you take American products, which are very much below ours: I have supposed the American land as good, and the produce as large as in England ; consequently as much labour. The prices

sent, of oxen, cows, sheep, &c. justify the lowering the stock of American farms 20s. an acre ; but it will not justify it, if they are not as well built, and inclosed as in England, which I suppose them to be, estimating the purchase of our land not at 10l. 16s. but at 16l. 16. an acre. I have supposed very good husbandry in England at five rents ; but then I give America the equal advantage of it, by allowing her the same.

The error, if there is one, I conjecture to be, supposing *the whole* American farm what the Suffolk one *must be*, all cultivated at a good price per acre ; whereas it is obvious that the great profit to be derived from agriculture in America, is to have 1000, 1500, or 2000 acres of waste adjoining to such a farm, which waste should be, by very simple methods, converted to sheep walk, and so made the dunghill for the cultivated land. In such case, the rent of that waste would be the interest of the money it would sell for : as the country is peopled, the rent so estimated would gradually rise, till at last it would answer no longer to adhere to such a destination. The object is very important to convert wood to profit at small expence. I have grubbed several acres, the expence 10l. an acre ; but the wood pays : with labour cent. per cent. higher, and wood of no value, wood land thus acquired would be dearer near 5l. per acre than land improved, cultivated, and built, in England.

The return of a sheep in England, weight alive 150lb. may be estimated at 10s. besides keeping up or renovating the stock : mutton at 5d. and wool at 9d. long or 1s. 3d. short (9d. producing more money than 1s. 3d.) In America mutton at 3d. 1-4 and wool at 1s. a sheep ought to yield 7s. 6d. Suppose 1000 acres bought for 1000l. and feeding 1000 sheep only, yielding 7s. 6d. each, or even but 5s. and here is a profit at once arising, such as in England we know nothing of : but from all accounts, this is not the husbandry, and therefore I suppose a market impracticable.

				£,	s.	d.
England, per cent. on capital,	-	-	-	5	0	0
Ditto, nett profit,	-	-	-	5	3	0
				<hr/>		
				£.	10	3 0

						£.	s.	d.
America,	-	-	-	-	-	5	0	0
Ditto, nett,	-	-	-	-	-	10	11	0
						<hr/>		
						£.	15	11 0
						<hr/>		

Team, seed, ware and tear, reckoned to neither of these, will reduce the interest on the English capital to about 5 1-2 per cent.

*Bradfield-Hall, Jan. 18, 1792.*

*Bradfield-Hall, Jan. 15, 1793.*

IS it possible, that the inhabitants of a great continent not new settlers, who live only to hunt, to eat, and to drink, can carry on farming and planting as a business, and yet never calculate the profit they make by *per centage* on their capital? And yet this seems to be the case.

The farm of 200 acres in Bucks county, is such as an Englishman would not accept; for it carries on the face of the account which I have drawn out (A) a dead loss, and not an inconsiderable one: yet the whole labour of a family of five persons is thrown away in order to arrive at that loss.

The Pittsburg account (B) is so much more profitable that I know not how to believe that I understand it rightly; but I have calculated the products named, as issuing from the quantity of land noted; consequently there is 115l. from 47 acres arable, which is more than the double of the Bucks, farm.

The Maryland account (C) seems to be very good land, and to yield well; but no note being inserted of expences, it is impossible to calculate the profits.

Mr. JEFFERSON'S Virginia calculation comes much nearer to the point; but I cannot admit it: he reckons 60l. a year increasing value of negroes, and 156l. a year rise in value of land. These articles may be fact in certain circumstances, but they will not do for comparisons.—In the first place, to have a considerable vaule invested in slaves, is a hazardous capital; and there is no man in the world who would not give 60l. a year on 6000

acres, to be able to change slaves to cows and sheep: he cannot otherwise command labour, and therefore must keep them; but the profit in any other light than labourers, is inadmissible. As to the rise on lands, it may be fair; but taking place equally, perhaps, in Europe; it must not come into the account. During the last ten years, land in England has risen one third in value. Correcting thus Mr. JEFFERSON's account, his capital pays 11 per cent. as in (D). There are, however, many deductions to be made; as wear and tear of implements, carriage, team, seed, repairs of buildings, white servants, overseers, &c. &c. These ought, as I conjecture, to amount to near 200l. a year, which, if so, would reduce the profit in the gross to about eight per cent.

But I have a heavier objection than this, and which bears upon the pith of the subject. How can Mr. JEFFERSON produce annually 5000 bushels of wheat, worth 750l. by means of a cattle product, of only 125l.? I do not want to come to America, to know that this is simply impossible: at the commencement of a term it may do, but how long will it last? This is the management that gives such products, as eight and ten bushels an acre. Arable land can yield wheat only by means of cattle and sheep; it is not dung that is wanted so much as a change of products: repose under grasses is the soul of management; and all cleaning and tillage to be given in the year that yields green winter food. By such a system, you may produce, by means of 40 oxen and 500 sheep, 5000 bushels of wheat; and if you raise the oxen to 50, and sheep to 600, you may have so much more wheat; but it is only by increasing cattle that you can increase wheat *permanently*.—125l. from cattle, to 750l. from wheat, would reduce the finest farm in the world to a *caput mortuum*; that is to say to ten bushels an acre which must be nearly such.

Here then opens the part of the subject of my inquiries, where most darkness hangs—the *demand* for cattle and sheep products. It is the quantity to be sold that makes the difficulty. The demand must be boundless, or encouragement will be wanting.

Wolves are named as a motive for not keeping sheep; surely they cannot be serious, who urge it. They abound

all over Europe: in France and Spain, among the greatest flocks in the world; and no wolf could get into my sheep-houses, or at least I may say, that nothing is so easy as to keep him out, even of a yard. Dogs also are an enemy: but America surely has laws, as well as we, that make every man answerable for the mischief done by his dog. By night, if secure from wolves they are secure from dogs; and by day, shepherds may have loaded fire-arms to kill all that approach. While sheep are kept by scores, such objections may hold good; but when by hundreds and thousands, they must vanish.

In the culture of grass for pasturage, as preparatory to corn, the profit of well applying this principle in America, must be very great; there is every advantage of soil, and extent of farm, and no drawback but the rate of labour. Pasturage demands scarcely any labour; so that if there is one system that squares more to the circumstances of America (not forgetting the disposition of the land to run to white clover) than another, it is to adopt a course of crops that takes grass in very largely.

Surely the enormous rise in the price of wool in England and Holland, for two years past, must affect America, and instigate to an increase in the breed of sheep. The freight, when pressed into a smaller compass, is a traffic; and the price is now such, that a fleece alone from American lands, without reckoning the carcass at any thing, must be more valuable than the profit on a crop of wheat of eight or ten bushels an acre, on all lands that will produce white clover spontaneously.

Suppose on some of the mountain-lands (mountains are no objection on account of wolves, for the Pyrenees are full of both sheep and wolves) which are to be bought for 5s. to 20s. an acre; at Pittsburgh, 16s. 8d.; at Fluvanna, 20s. Suppose 20s. sterling an acre, it is 1s. an acre rent—such land, by carrying only one sheep per acre, producing wool only 5lbs. at 1s. or 5s. a head; and the mutton to do no more than pay for losses, shepherd, &c. here is a profit such as corn cannot rival; five rents paid by wool! The West Indies are, however, too near for salted mutton, to want a market; and if it sold for only 1d. per lb. the object on a large scale would be important.



## 200 ACRES, BUCKS COUNTY, PENNSYLVANIA. (A)

<i>Expences.</i>		<i>Produce.</i>	
	Dollars.		Dollars.
200 acres, price	3200	Wheat, 20 acres, 200	
dollars, interest at		bushels, - - -	180
five per cent, -	160	Rye, 5 acres, 50 bush-	
<i>Consumption on Farm.</i>		els, - - -	30
Indian corn, -	80	Indian corn, 20 acres,	
Rye, -	13	300 bushels, -	120
Buck-wheat, -	13	Buck-wheat, 5 acres, 75	
Hay, -	120	bushels, - - -	22
	228	Oats, 5 acres, 100 bush-	
<i>Labour hired.</i>		els, - - -	20
Two men, one boy, and		Flax, - - -	30
one girl, fed; but		Cyder, - - -	30
supposed not, for		Hay, - - -	120
simplicity of calcula-		Cattle (12), - - -	70
tion, - - -	350	Sheep (20), - - -	28
Taxes, - - -	8	Hogs, - - -	80
		Poultry, - - -	10
	747		
Maintenance of a fami-			740
ly of five persons,			
Seed for the above.		Five dollars per acre	
		on 150 acres.	

## 314 ACRES, PITTSBURG. (B)

<i>Expences.</i>			
Purchase of 314 acres, at 16s. 8d.	261l.	£.	s. d.
Interest at 5 per cent. - - -	- - -	13	0 0
<i>Consumption by Cattle.</i>			
30 bushels rye, 2s. 6d.	- - -	3	15 0
200 - Indian corn, 2s.	- - -	10	0 0
60 - oats, 1s. 6d.	- - -	4	10 0
160 - potatoes, 1s. 10d.	- - -	14	13 0
		£.45	18 0

	<i>Produce.</i>	<i>£.</i>	<i>s.</i>	<i>d.</i>
150 bushels wheat, at 3s. 9d.	-	28	2	6
150 ——— rye, at 2s. 6d.	-	18	10	0
150 ——— Indian corn, 2s.	-	25	0	0
160 ——— oats, 1s. 6d.	-	12	0	0
50 ——— barley, 3s. 9d.	-	9	7	6
50 ——— buck-wheat, 1s. 6d.	-	3	15	0
200 ——— potatoes, 1s. 10d.	-	18	6	0

From 47 acres, *£*.115 1 0

TALBOT COUNTY, MARYLAND, 450 ACRES. (C)

<i>Expences.</i>	<i>Produce.</i>		
Price, 2500 <i>l.</i> ; interest at five per cent. - <i>£</i> .125	Wheat, -	<i>£</i> .263	0 0
	Corn, -	67	0 0
	Potatoes, -	50	0 0
	Tobacco, -	50	0 0
	Wood -	20	0 0
	Hay, -	25	0 0
	Hemp, -	0	10 0
	Flax, -	2	10 0
	Wool, -	10	0 0
	Butter, -	20	0 0
	Cattle, -	120	0 0
	Horses, -	250	0 0
	Sheep, -	75	0 0
	Hogs, -	60	0 0

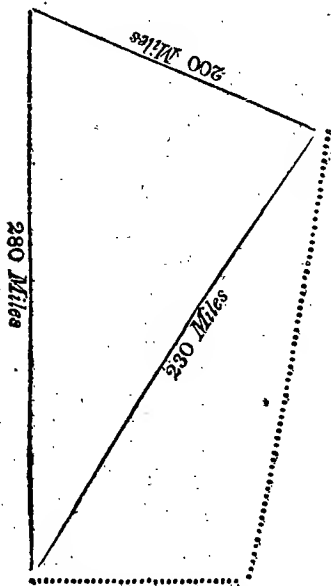
On 450 acres, *£*.1013 0 0

VIRGINIA. (D)

<i>Expences.</i>	<i>Produce.</i>	
Interest of 6187 <i>l.</i> stock in land, and negroes, and utensils, &c. <i>£</i> 309 7 6	Wheat, 5000 bushels	<i>£</i> .750
Clothes, &c. neg. 150 0 0	Meat, 5 <i>l.</i> a head,	125
Taxes (corrected), 30 0 0		875
		489

<i>£</i> .489 7 6	Profit on capital of 6187 <i>l.</i> -	<i>£</i> 386
	Or per cent. -	6 4 0
	Add 5 <i>l.</i> -	5 0 0
		<i>£</i> .11 4 0

*District.*—In the map prefixed to Mr. JEFFERSON'S Virginia, the county of Botetourt, as traced by the mountains, forms nearly a triangle. From the south point of that triangle draw two lines ; one to Alexandria, and the other to Fort Pitt, and you inclose a country of this form and size :



By extending it to the dotted line, it will strike the bend in the Fluvanna, near *Toher*, *Randolph*, and *Snowden*, and include a country, which ought to be gentle slopes, rising to the mountains. This large district ought, upon *theory*, to be the best sheep country in America.

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*Philadelphia, June 20th, 1793.*

DEAR SIR.

I HAD prepared the inclosed a considerable time ago, but have waited for a communication from a person who does the most in the grazing line, of any person I have

heard of. But he has not made the communication, from a silly belief that it is not for a public purpose, but a private one, that I wish to get the account from him. I, therefore, delay no longer to send you the best answer to Mr. YOUNG's query, I can make.

I am, &c. &c.

RICHARD PETERS.

*The President of the United States.*

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*Philadelphia, June 28th, 1793.*

DEAR SIR,

I SHOULD have taken time ere this, to have considered the observations of Mr. YOUNG, could I at this place have done it in such a way as would satisfy either him or myself. When I wrote the notes of the last year, I had never before thought of calculating what were the profits of a capital invested in Virginia agriculture. Yet that appeared to be what Mr. YOUNG most desired. Lest, therefore, no other of those, whom you consulted for him, should attempt such a calculation, I did it; but being at such a distance from the country of which I wrote, and having been absent from that, and from the subject in consideration, many years, I could only, for my facts, recur to my own recollection, weakened by time, and very different applications, and I had no means here of correcting my facts. I, therefore, hazarded the calculation, rather as an essay of the mode of calculating the profits of a Virginia estate, than as an operation which was to be ultimately relied on. When I went last to Virginia, I put the press copy of those notes into the hands of the most skilful and successful farmer in the part of the country of which I wrote. He omitted to return them to me, which adds another impediment to my resuming the subject here.—But indeed if I had them, I could only present the same facts, with some corrections, and some justifications of the principles of calculation. This would not, and, ought not, to satisfy Mr. YOUNG. When I return home, I shall have time and opportunity of answering Mr. YOUNG's inquiries fully. I will first establish the

facts, as adapted to the present times, and not to those to which I was obliged to recur by recollection; and I will make the calculation on rigorous principles. The delay necessary for this will, I hope, be compensated by giving something which no endeavours on my part shall be wanting to make worthy of confidence. In the mean time, Mr. YOUNG must not pronounce too hastily on the impossibility of an annual production of 750l. worth of wheat, coupled with a cattle product of 125l. My object was to state the produce of a *good* farm, under *good* husbandry, as practised in my part of the country. Manure does not enter into this, because we can buy an acre of new land cheaper than we can manure an old one. *Good* husbandry with us, consists in abandoning Indian corn, and tobacco: tending small grain, some red clover, fallowing, and endeavouring to have, while the lands are at rest, a spontaneous cover of white clover. I do not present this as a culture judicious in itself, but as *good*, in comparison with what most people there pursue. Mr. YOUNG has never had an opportunity of seeing how slowly the fertility of the *original soil* is exhausted, with moderate management of it. I can affirm, that the James river low-grounds, with the cultivation of small grain, will never be exhausted; because we know, that, under that cultivation, we must now and then take them down with Indian corn, or they become, as they were originally, too rich to bring wheat. The high-lands where I live, have been cultivated about 60 years. The culture was tobacco and Indian corn, as long as they would bring enough to pay the labour; then they were turned out. After four or five years rest, they would bring good corn again, and in double that time, perhaps, good tobacco. Then they would be exhausted by a second series of tobacco and corn. Latterly we have begun to cultivate small grain; and excluding Indian corn, and fallowing, such of them as were originally good, soon rise up to fifteen or twenty bushels the acre. We allow that every labourer will manage ten acres of wheat, except at harvest.—I have no doubt but the coupling cattle and sheep with this, would prodigiously improve the produce. This improvement, Mr. YOUNG will be better able to calculate than any body else. I am so well satisfied of it myself, that having engaged a good farmer from the head of Elk (the style of farming there you know well), I mean

in a farm of about 500 acres of cleared land, and with a dozen labourers to try the plan of wheat, rye, potatoes, clover, with a mixture of some Indian corn with the potatoes, and to push the number of sheep. This last hint I have taken from Mr. YOUNG's letters, which you have been so kind as to communicate to me. I had never before considered, with due attention, the profit from that animal. I shall not be able to put the farm into that form exactly the ensuing autumn, but against another I hope I shall; and I shall attend with precision to the measures of the ground, and to the product, which may, perhaps, give you something hereafter to communicate to Mr. YOUNG, which may gratify him; but I will furnish the ensuing winter, what was desired in Mr. YOUNG's letter of January 17, 1793.

I have the honor to be, &c.

THOS. JEFFERSON.

*To the President of the United States.*

OBSERVATIONS ON AN EXTRACT OF A LETTER, DATED  
17th JANUARY, 1793, FROM ARTHUR YOUNG, ESQ. TO  
THE PRESIDENT OF THE UNITED STATES.

1. "YOUR information has thrown me afloat on the high seas. To analyze your husbandry, has the *difficulty of a problem*. Is it possible, that the inhabitants of a great Continent, &c. can carry on farming as a business, and yet never calculate profit by per centage on capital?" &c.

I know not where to land Mr. YOUNG from his sea-voyage, unless facts, well known and *felt* here, serving as pilots to guide him into a safe harbour, will enable him to arrive on a shore, pleasant in its prospects, and abundant in its resources; not so much indebted to Art as to Nature, for its beauties and conveniences. Let him but realize his proposals of coming among us (I presume as a visitant), and judge for himself. He will not be embarrassed with unavailing conjectures, or laborious calculations: he will find, that, added to our situation as a new country, where much land is to be had for little money. our political arrangements contribute to our happiness, and

to our moderate, but competent wealth. We have no princes, to indulge the grades more immediately beneath them, in their pleasures and their passions, that they may themselves be supported at the expence of the nation, in their schemes of ambition and luxury—no over-grown nobles, to wanton on the hard earnings of an oppressed yeomanry ! He will find a respectable *clergy*, chosen by their respective congregations, and reputably supported by the voluntary contributions of their hearers. But these are not ecclesiastical drones !—*fruges consumere nati* : they do, *themselves*, the duties required of them ! they act not in the affairs of heaven by deputies, whose poverty is truly apostolical ; the penurious stipends allowed them by their grasping superiors, compelling them to be conversant only in the *fasts*, while their principals revel in the *feasts*, of the church. In a word, he will not see a sable host of superfluous and pampered priests (maintained by numbers who do not hear, or believe in their doctrines), who fatten on the property of the people ; and, while they fetter and terrify men's consciences, to mould them to their purposes, eat out their substances, under the sanction of law. These descriptions of characters, in other countries, create and increase taxes ; while they render their subordinates less liable to pay them, by enormous rents, made necessary by their dissipation and extravagance, and by their capricious terms of leasing lands, of which they are the principal engrossers. *England* has perhaps, less reason to complain, on these accounts, than some other European countries : but, if we had no other statements to rely on than those given by Mr. YOUNG himself, we should know enough to be convinced, that, even there, some of these causes produce misfortunes in sufficient plenty. Not having the least inclination, if it were in my power, to disturb the systems of other nations, and wishing the happiness of mankind in their own way, I do not mention either our positive or negative prosperity, with a view to draw odious or disagreeable comparisons. The world will never agree about forms of government. Let those who think well of grades in society, be happy in the possession of such arrangements. We consider it fortunate, and feel it beneficial, that we have them not.

*Taxes*, it is said by some, stimulate to industry ; and,

therefore, the higher the tax, the greater the exertion, and the more employment. But, if this were a more tenable doctrine than it is, I see not that man should labour not for himself—or for himself too hardly: nor should he be compelled, by artificial necessity, like a criminal immersed to the chin in water constantly flowing in upon him, incessantly to pump, or perish. *Taxes* we have, but the greater part are imperceptible, and all of them light. The moderate expences of our government, and the mediocrity of our public debt, do not require heavy and ruinous taxation. The backs to bear it, increase faster than the burthen; and we are too far removed from the scenes of ruinous and unnecessary wars, to dread any sudden or fatal increase of it. Wars are generally produced by the pride, vanity, interest, or ambition of hereditary rulers.

The great body of an industrious people are inclined to peace; and from these, our government will always take its tone. As to our wars with the savages, they are, for the time, embarrassing, locally distressing, and, generally expensive; but are not *nationally* formidable, or dangerous. Disputes with them must gradually diminish, and, at no distant period, end. Though the reflection be painful to humanity, it is justified, in point of fact, by experience, that the nations in contact with the whites, always have been, and ever will be, exterminated. The approaches of our settlements, always banish the Indians.

Our laws are generally liberal in their policy. We have no narrow arrangements, which, under false notions of national convenience, or shadowy and miscalculated political restrictions, palsy agriculture and commerce, by preventing those who possess the products of the country, from disposing of what their labour has created, *when, where and how* they please. Free from such restraints, and from the pressure of heavy rents, *church-dues*, and taxes, our farmers are the proprietors of the soil they cultivate: they gather the honey, shear the fleece, and guide the plough, for themselves alone. It is not the "*sic vos non vobis*" of Europe. They increase the value of their capital, while they labour for their sustenance. They do not, indeed, *receive* an annual interest, or revenue, on their capital; but they *pay* none: yet, by their exertions for their own support and accom-



modation, and the growing population and improvement of the country, to which every one, stranger as well as native, contributes, more than an European per centage is added to their principal; insomuch, that farms will increase, in very many parts of the country, tenfold in their value, in less than 20 years. Immense tracts of new lands have been recently sold by the State of Pennsylvania, at less than an English shilling per acre. Great and extensive bodies of these lands can be now procured, at second hand, at less than half Mr. Y.'s calculation for mountain-lands. I know valuable tracts, of great extent, within a few days ride of Philadelphia, which may be had at from 3 to 9s. sterling per acre. These are not "mountain-lands," though, like all the face of our country, they are cut in some places, by ridges. They are, for the most part, level, and so luxuriant in pasturage, that, maugre our winters, cattle now pass that season in prime order, without cover, or artificial forage. They command both the New-York and Philadelphia markets, and are situated in a safe country, which will, ere long, be as great for grazing as any in America. Other States have similar advantages. Mr. Y.'s farm, or even his 60 acres, and the sheep he summered on it, will buy him a little territory; and his capital, in 10 years, will be increased 500 per cent. This is not a bad per centage, nor is it a visionary calculation. I wish not to throw out falacious temptations, but to relate facts, merely to shew why our farmers need not make nice calculations about per centage. They have now, and always have had, a sure resource for the wear of their sea-board farms, &c. the growth of their families. Children in Europe, are often a burden and expence. The wealth of a great part of the American farmers, grows with the additions to their families. The children assist in the labour of the old farm, or in the establishment of the new one. This supersedes the necessity of calculating on hired labourers, the work being chiefly done within themselves: they are paid by the increased value of the *common stock*. Our laws contrary to the feudal injustice of Europe, encourage and direct equality of distribution among the children of intestate descendants; so that many parents purposely omit making wills, contented with the distribution made by law. And though every man has the right, at his pleasure, to dispose of his

estate by will or deed, yet the habits of thinking on such occasions, take their bias from the spirit of our laws. Many, who have large families, and want room, or are tired of their old farms, think it better to sell, and remove to places where Nature is in her prime; leaving to their successors, the toil, *calculation*, and expence of renovating lands exhausted by bad tillage. The worn farms always find purchasers; and the price paid for them, buys a sufficient quantity of new land, besides leaving a surplus in cash, for improvement. One day this must have an end; but that day is far distant. When it arrives, the proprietors of old lands will adopt better systems of agriculture, which are now fast advancing. These will add to the products of their lands, and procure them more wealth, but possibly not more happiness, in our more ancient settlements. Our old lands are capable of renovation, having a good staple, as has been proved in numberless instances.

I condemn not *calculation*, which is prudent and proper in every business—" *Ego sum pictor*."—I am sometimes seized with the faculty of calculating, but not always successful in the practical proof of it. I need not, however, be discouraged; for I often read, with pleasure, Mr. Y.'s writings: I admire his genius and respect even his enthusiasm; in which he often strikes out fine thoughts: but I venerate his candour, while he frequently acknowledges, that success does not always crown his own calculations, or invariably durable conviction, his opinions. We have here innumerable instances of farmers who get forward, without ever spending a thought on per centage, or other nice calculation. And however "*problematical*" this may seem, it is an observation as old as the first appearance of the redoubtable HUDIBRAS, that

"No argument like matter of fact is."

I ask your forgiveness for the multifarious, and perhaps tiresome, scope I have taken. The easy situation of an industrious, full-handed American farmer is the pleasing result of a combination, produced by all the causes I have mentioned. Instead of calculating, he labours and enjoys. And thought I do not profess to have a good opinion of the style of American husbandry, yet even this shews the

happy situation, in other respects, of our country. With such farming in Europe, the farmers would starve, and leave their children common labourers, or beggars. And yet, here, they live well, and leave their descendants the means of obtaining the comforts and conveniences of life\*. This is the problem I have endeavoured to solve. And I could not, but by this circuitous route arrive at the answer to Mr. Y's. question, "Is it possible that the inhabitants of a great Continent not new settlers, who, of course, *live to hunt, to eat, and to drink*, can carry on farming as a business, and yet never calculate the profit they make by per centage on their capital?"—The phraseology, "*who, of course, live to hunt, to eat, and to drink*," I do not perfectly comprehend. Our *hunters* are only a few borderers, and not to be counted upon as farmers; nor are our farmers, though they have not the best systems, *idle*. I therefore think, that (without meaning a *critique*) "*who eat and drink, to live*," would have been a more just arrangement of language.

2. "The demand for cattle and sheep, products, hides, tallow, barrelling beef, sheep, wool, wolves, dogs, and law respecting their killing sheep."

The demand for cattle products is as great as we can supply; and the cattle business may be carried on to any extent. This will be a growing and extensive business, and can be pushed as far, and to as great advantage, as in any other country. We have people acquainted with the victualling branch, in all its details; and as this is a country which invites those who "are weary and heavy laden," *not* "to give them rest," but profitable employment, we have some from Cork, and can have more from thence, and any other part of the world. Our exported beef is in good credit, particularly that from Boston. I have ate mess-beef put up in Philadelphia, after having been an East India voyage, in excellent condition.—With this beef, a sample of Philadelphia brewed porter was produced. This had been the same voyage, was perfectly good, and not inferior to English porter. Our merchants prefer our own, though they can purchase Irish beef. The *tallow* will always sell to profit, and is chiefly consumed

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\* *There is much good sense in many of this gentlemen's observations.*—A. Y.

here. The *hides* do not supply our home demand, and therefore importations of Spanish and other hides are frequent. A great proportion of our beef, and all our mutton, are consumed at home ; as our people will live well, and eat more meat than any equal number in the world. If the sheep business was carried on to much extent, there would be a necessity for exportation. The establishment of considerable manufactures, which is more practicable and beneficial in this country, than many people (particularly those of Europe) suppose, will take off part of the mutton of our flocks. There is little or no export of wool to foreign parts ; though it is brought coastways, as it happens to be more abundant in one State than in another. There is no prohibition against the exportation of this, or any other product. But it is consumed at home, where excellent coarse cloths are made, in which a great proportion of our farmers are clad. A variety of other woollen fabrics are also made.

I have no copy of what I mentioned respecting *sheep destroying pasture*. I know they do not eat so much in proportion as other beasts, and their dung is remarkably fertilizing ; but they bite close, and the droughts and heats of summer, which are here long and periodical, burn up the roots. It is a generally received opinion here, that they destroy pasture ; and I am warranted, by my own experience, to give into it, with some qualifications. We do not find that “ the more sheep we keep, the more we may.” I believe, in the state of our agriculture, the converse is the most true. In counties where it is an object, and where there are better systems of farming, with dripping seasons, it may be otherwise. I once thought, in some degree, as Mr. YOUNG does, but find that English ideas will not in this, and many other agricultural cases, apply here. In the present state of things, I adhere to my former opinion—that distributing sheep in small numbers, to every farmer, will do better than any other plan. I know that *more*, instead of *less*, care can be taken of them in this way, for the farmer can, and does attend to them, without interfering too much with his other affairs. Invariably, the sheep of one of our small flocks look the best, and have the most wool. With twenty sheep to each farm capable of supporting them, we might have a prodigious number. If Mr. YOUNG were here,

and in the prime of life, and would practise his systems, so as to improve the whole mass of agriculture, much might be done. Our difficulty is to carry large flocks through our long winters. As things are, I have a better opinion of the cattle business than that of sheep ; and I think the former would succeed better than the latter, with all the management that could be bestowed on it. No one knows, however, what might be done, if the whole capitals and attention of industrious, intelligent, and experienced men were drawn to this point. Our snowy winters would embarrass, if not ruin the turnip plants ; and the droughts of summer their large flocks. If chiccory be a serious auxiliary, it is well. It grows as a weed in many parts of this country.

In the observations upon sheep, you were pleased to desire of me on a former occasion, I exhausted my small stock of knowledge on that subject. If any thing in these observations is applicable now, I beg to refer you to them.

*Wolves* are a serious enemy to the sheep plan, in places where there are the largest ranges. Time may, perhaps, subdue them. But we have paid for forty or fifty years past, out of our county-rates, 20s. for a wolf's head ; and though they are chiefly banished from our plains and older settlements, yet on our mountains they are plenty. Where a large ridge runs through a country, in other parts ever so well peopled, they find retreats, and breed prodigiously. Unless we can have the *Pyrenean millenium*, in which wolves and sheep, it seems, live together in *worshipful society*, I know not a speedy remedy. I lay not long ago, at the foot of the South Mountain, in York county, in this State, in a country very thickly settled, at the house of a Justice of Peace. Through the night I was kept awake by what I conceived to be a jubilee of dogs, assembled to bay the moon. But I was told in the morning, that what disturbed me, was *only* the common howling of wolves, which nobody there regarded. When I entered the *Hall of Justice*, I found the 'Squire giving judgment for the reward on two wolf whelps a countryman had taken from the bitch. The *judgment-seat* was shaken with the intelligence, that the she-wolf was coming—not to give bail—but to devote herself or rescue her offspring. The animal was punished for this *daring contempt*, committed in the face of the court, and was shot within an

hundred yards of the tribunal. The storge had prompted her to go a little too far.

Dogs are also formidable—too many being uselessly kept by the wealthy, and not a few by poor people, who do not feed them. The law is exactly the same as in England. But it is difficult to prove that the owner had the required *scienter* of his dog being accustomed to kill sheep. It is also difficult to discover the destroyer. He often reigns like an Achilles, but not so open in his feats of destruction. We suffer, therefore, the devastations committed by this nocturnal marauder, and see our slaughtered sheep,

“ Whose limbs unburied on the naked shore  
 “ Devouring dogs and hungry vultures tore.”

As to the law, our farmers are not fond of it, on such occasions. They think the first loss sufficient, and rather submit to the ravages of the “devouring dogs,” than risque their purses being “torn” by those they dread, as much as if they were “hungry vultures.” In short, they prefer losing the value of their sheep, to being fleeced, as they suppose, in a prosecution for damages. If they discover the guilty dog, they proceed in a summary way—they shoot him, or otherwise put an end to his career. To multiply their chances of punishing the culprit, they often bring to the *lanterne*, or *guillotine*, a number of victims, as is sometimes done on more important occasions: a practice, however, not very justifiable, even in the case of dogs. It is doing justice as quickly, if not so reputably, as was done in England by their old court of *Trail-baton*, which, as my Lord COKE says, was as rapid in its movements, “as one might draw, or traile, a staffe, or stycke.”

We must establish such a court here, if the business of sheep-feeding is largely extended: and perhaps send for some Pyrenean wolves, to train our mountaineers to a little more civility. If this fails, we must turn our dogs upon them, and, as artful politicians treat their fellow-bipeds, keep ourselves safe, by stimulating one enemy to root out another, and so ruin both in the contest. Seriously, if we had the means of keeping large flocks, so as to employ shepherds, we might manage both wolves and dogs; but, at present, it is not an attainable object.

*Philadelphia, September 1, 1793.*

SIR,

INSTEAD of commencing this letter with an apology, for suffering your favour of the 17th of last January to remain so long unacknowledged, I will refer you to the bearer, who is perfectly acquainted with my situation, for the reason why it has done so.

The bearer, Sir, is Mr. LEAR, a gentleman who has been a member of my family seven years, and, until the present moment, my Secretary; consequently cannot, as I have observed before, be unknowing to the nature, and pressure of the business in which I am continually involved.

As a proof, however, that I have not been altogether inattentive to your commands, I inclose the result of Mr. PETERS's answer to some inquiries of yours; and the copy also of a letter from Mr. JEFFERSON, to whom I had propounded for solution, other queries contained in your letter of the above date.

The documents I send, have the signature of these gentlemen annexed to them, but for your satisfaction only.

Mr. PETERS is, as you will perceive by a vein in his letter, a man of humour. He is a theorist, and admitted one of the best practical farmers in *this* part of the State of Pennsylvania.

But as it is not so much what the soil of this country actually produces, as what it is capable of producing by skilful management, that I conceive to be the object of your inquiry; and to know whether this produce would meet a ready market, and good prices; what the nature of the climate in general, is; the temperature thereof, in the different States; the quality, and prices of the lands, with the improvements thereon, in various parts of the Union; the prospects which are unfolding in each, &c. &c. I can do no better than refer you to the oral information of the bearer, who is a person of intelligence, and pretty well acquainted with the States, from New Hampshire, (inclusive) to Virginia; and one in whom you may, as I do, place entire confidence in all he shall relate of his own knowledge; and believe what is given from information, as it will be handed with caution.

Mr. LEAR has been making arrangements for forming an extensive commercial establishment at the Federal City, on the river Potowmae; and now goes to Europe, for the purpose of taking measures, there, to carry his plan into effect. I persuade myself, that any information you can give him respecting the manufactures of Great Britain, will be gratefully received: and, as I have a particular friendship for him, I shall consider any civilities shewn him by you, as a mark of your politeness to,

Sir,

Your most obedient,  
and very humble servant,

G. WASHINGTON.

*Arthur Young, Esq.*

*Philadelphia, December 12, 1793.*

SIR,

I WROTE to you three months ago, or more, by my late secretary and friend, Mr. LEAR; but as his departure from this country for Great Britain, was delayed longer than he or I expected, it is at least probable that that letter will not have reached your hands at a much earlier period than the one I am now writing.

At the time it was written, the thoughts which I am now about to disclose to you, were not even in-embryo: and whether, in the opinion of others, there be impropriety, or not, in communicating the object which has given birth to them, is not for me to decide. My own mind reproaches me with none; but if yours should view the subject differently, burn this letter, and the draught which accompanies it\*, and the whole matter will be consigned to oblivion.

All my landed property, east of the Apalachian mountains, is under rent, except the estate called Mount Vernon. This, hitherto, I have kept in my own hands: but from my present situation, from my advanced time of life, from a wish to live free from care, and as much at

\* *A Map of the General's Farm.*



my ease as possible, during the remainder of it, and from other causes, which are not necessary to detail, I have, latterly, entertained serious thoughts of letting this estate also, reserving the mansion-house farm for my own residence, occupation, and amusement in agriculture; provided I can obtain what, in my own judgment, and in the opinion of others whom I have consulted, the low rent which I shall mention hereafter; and provided also I can settle it with *good* farmers.

The quantity of ploughable land (including meadow,) the relative situation of the farms to one another, and the division of these farms into separate inclosures, with the quantity and situation of the woodland appertaining to the tract, will be better delineated by the sketch herewith sent (which is made from actual surveys, subject, nevertheless, to revision and correction), than by a volume of words.

No estate in United America, is more pleasantly situated than this. It lies in a high, dry and healthy country, 300 miles by water from the sea, and, as you will see by the plan, on one of the finest rivers in the world. Its margin is washed by more than ten miles of tide-water; from the bed of which and the innumerable coves, inlets, and small marshes, with which it abounds, an inexhaustible fund of rich mud may be drawn, as a manure, either to be used separately, or in a compost, according to the judgment of the farmer. It is situated in a latitude between the extremes of heat and cold, and is the same distance by land and water, with good roads, and the best navigation (to and) from the Federal City, Alexandria, and George-Town; distant from the first, twelve, from the second, nine, and from the last, sixteen miles. The Federal City\*, in the year 1800, will become the seat of the general government of the United States. It is increasing fast in buildings, and rising into consequence; and will I have no doubt, from the advantages given to it by Nature, and its proximity to a rich interior country, and the western territory, become the emporium of the United States.

The soil of the tract of which I am speaking, is a good

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\* *The General favoured me also with a large and beautiful Plan of this intended City.*

loam, more inclined, however, to clay than sand. From use, and I might add, abuse, it is become more and more consolidated, and of course heavier to work. The *greater* part is a greyish clay; some part is a dark mould; a very little is inclined to sand; and scarcely any to stone. A husbandman's wish would not lay the farms more level than they are; and yet some of the fields (but in no great degree) are washed into gullies, from which all of them have not as yet been recovered.

This river, which encompasses the land the distance above-mentioned, is well supplied with various kinds of fish, at all seasons of the year; and, in the spring, with the greatest profusion of shad, herrings, bass, carp, perch, sturgeon, &c. Several valuable fisheries appertain to the estate; the whole shore, in short, is one entire fishery.

There are, as you will perceive by the plan, four farms besides that at the mansion-house: these four contain 3260 acres of cultivable land, to which some hundreds more, adjoining, as may be seen, might be added; if a greater quantity should be required; but as they were never designed for, so neither can it be said they are calculated to suit, tenants of either the first, or of the lower class; because, those who have the strength and resources proportioned to farms of from 500 to 1200 acres (which these contain), would hardly be contented to live in such houses as are thereon: and if they were to be divided and sub-divided, so as to accommodate tenants of small means, say from 50 to one or 200 acres there would be none, except on the lots which might happen to include the present dwelling-houses of my overlookers (called bailiffs with you), barns, and negro-cabins: nor would I choose to have the wood-land (already too much pillaged of its timber) ransacked, for the purpose of building many more. The soil, however, is excellent for bricks, or for mud-walls; and to the buildings of such houses there would be no limitation, nor to that of thatch for the cover of them.

The towns already mentioned (to those who might incline to encounter the expence), are able to furnish scantling, plank, and shingles, to any amount, and on reasonable terms; and they afford a ready market also for the produce of the land.

On what is called Union Farm (containing 928 acres of arable and meadow), there is a newly erected brick barn, equal, perhaps, to any in America, and for conveniences of all sorts, particularly for sheltering and feeding horses, cattle, &c. scarcely to be exceeded any where. A new house is now building in a central position, not far from the barn, for the overlooker : which will have two rooms, 16 by 18 feet, below, and one or two above, nearly of the same size. Convenient thereto, is sufficient accommodation for fifty odd negroes, old and young ; but these buildings might not be thought good enough for the workmen, or day-labourers, of your country.

Besides these, a little without the limits of the farm (as marked in the plan), are one or two other houses, very pleasantly situated, and which, in case this farm should be divided into two (as it formerly was), would answer well for the eastern division.—The buildings thus enumerated, are all that stand on the premises.

Dogue Run Farm (650 acres) has a small, but new-building for the overlooker ; one room only below, and the same above, 16 by 20 each ; decent and comfortable for its size. It has also covering for forty odd negroes, similar to what is mentioned on Union Farm. It has a new circular barn, now finishing, on a new construction ; well calculated, it is conceived, for getting grain out of the straw more expeditiously than in the usual mode of threshing. There are good sheds also erecting, sufficient to cover 30 work-horses and oxen.

Muddy-hole Farm (476 acres) has a house for the overlooker, in size and appearance nearly like that at Dogue Run, but older : the same kind of covering for about 30 negroes, and a tolerable good barn, with stables for the work-horses.

River Farm, which is the largest of the four, and separated from the others by Little Hunting Creek, contains 1207 acres of ploughable land, has an overlooker's house of one large, and two small rooms below, and one or two above ; sufficient covering for 50 or 60 negroes, like those before mentioned ; a large barn, and stables, gone much to decay, but will be re-placed next year, with new ones.

I have deemed it necessary to give this detail of the buildings, that a precise idea might be had of the con-

inconveniences and inconveniences of them ; and I believe the recital is just in all its parts. The inclosures are precisely and accurately delineated in the plan ; and the fences now are, or soon will be, in respectable order.

I would let these four farms to four substantial farmers, of wealth and strength sufficient to cultivate them, and who would ensure to me the regular payment of the rents ; and I would give them leases for seven or ten years, at the rate of a Spanish milled dollar, or other money current at the time, in this country, equivalent thereto, for every acre of ploughable and mowable ground, within the inclosures of the respective farms, as marked in the plan ; and would allow the tenants, during that period, to take fuel ; and use timber from the woodland, to repair the buildings, and to keep the fences in order until live fences could be substituted in place of dead ones ; but, in this case, no sub-tenants would be allowed.

Or if these farms are adjudged too large, and the rents, of course, too heavy for such farmers as might incline to emigrate, I should have no insuperable objection against dividing each into as many small ones, as a society of them, formed for the purpose, could agree upon, among themselves ; even if it should be by the fields, as they are now arranged (which the plan would enable them to do), provided such buildings as they would be content with, should be erected at their own expence, in the manner already mentioned.—In which case, as in the former, fuel, and timber for repairs, would be allowed ; but, as an inducement to parcel out my grounds into such small tenements, and to compensate me, at the same time, for the greater consumption of fuel and timber, and for the trouble and expence of collecting small rents, I should expect a quarter of a dollar per acre, in addition to what I have already mentioned. But in order to make these small farms more valuable to the occupants, and by way of reimbursing them for the expence of their establishment thereon, I would grant them leases for 15 or 18 years ; although I have weighty objections to the measure, founded on my own experience, of the disadvantage it is to the lessor, in a country where lands are rising every year in value. As an instance in proof, about 20 years ago, I gave leases for three lives, in land I held

above the Blue Mountains, near the Shenandoah river, seventy miles from Alexandria, or any shipping port, at a rent of one shilling per acre (no part being then cleared); and now land of similar quality, in the vicinity, with very trifling improvements thereon, is renting, currently, at five, and more shillings per acre, and even as high as eight.

My motives for letting this estate having been avowed, I will add, that the whole (except the mansion-house farm), or none, will be parted with, and that upon unequivocal terms; because my object is, to fix my income (be it what it may) upon a solid basis, in the hands of *good* farmers; because I am not inclined to make a medley of it; and, above all, because I could not relinquish my present course, without a moral certainty of the substitute which is contemplated: for to break up these farms; remove my negroes; and to dispose of the property on them, upon terms short of this, would be ruinous.

Having said thus much, I am disposed to add further, that it would be in my power, and certainly it would be my inclination (upon the principle above), to accommodate the wealthy, or the weak-handed farmer (and upon reasonable terms) with draught horses, and working mules and oxen; with cattle, sheep, and hogs; and with such implements of husbandry, if they should not incline to bring them themselves, as are in use on the farms. On the four farms there are 54 draught-horses, 12 working mules, and a sufficiency of oxen, broke to the yoke; the precise number I am unable this moment to ascertain, as they are comprehended in the aggregate of the black cattle: of the latter, there are 317; of sheep, 634; of hogs, many; but as these run pretty much at large in the wood-land (which is all under fence), the number is uncertain. Many of the negroes, male and female, might be hired by the year, as labourers, if this should be preferred to the importation of that class of people; but it deserves consideration, how far the mixing of whites and blacks together is advisable; especially where the former are entirely unacquainted with the latter.

If there be those who are disposed to take these farms in their undivided state, on the terms which have been

mentioned, it is an object of sufficient magnitude for them, or one of them in behalf of the rest, to come over and investigate the premises thoroughly, that there may be nothing to reproach themselves, or me, with, if (though unintentionally) there should be defects in any part of the information herein given; or, if a society of farmers are disposed to adventure, it is still more incumbent on them to send over an agent, for the purpose above-mentioned; for with me the measure must be so fixed, as to preclude any cavil or discussion thereafter. And it may not be *mal apropos* to observe in this place, that our overlookers are generally engaged, and all the arrangements for the ensuing crops are made, before the first of September in every year: it will readily be perceived, then, that if this period is suffered to pass away, it is not to be regained until the next year. Possession might be given to the new-comers at the season just mentioned, to enable them to put in their grain for the next crop; but the final relinquishment could not take place until the crops are gathered; which of Indian corn (maize), seldom happens till towards Christmas, as it must endure hard frosts before it can be safely housed.

I have endeavoured, as far as my recollection of facts would enable me, or the documents in my possession allow, to give such information of the actual state of the farms, as to enable persons at a distance to form as distinct ideas as the nature of the thing is susceptible, short of one's own view: and having communicated the motives which have inclined me to a change in my system, I will announce to you the origin of them.

First, Few ships, of late, have arrived from any part of Great Britain, or Ireland, without a number of emigrants; and some of them, by report, very respectable and full-handed farmers. A number of others, they say, are desirous of following, but are unable to obtain passages; but their coming in that manner, even if I was apprized of their arrival in time, would not answer my views, for the reason already assigned; and which, as it is the ultimatum at present, I will take the liberty of repeating, namely, that I must carry my plan into *complete* execution, or not attempt it; and under such auspices, too, as to leave no doubt of the exact fulfilment: and,

2dly, Because from the number of letters which I have received myself (and, as it would seem, from respectable

people), inquiring into matters of this sort, with intimations of their wishes, and even intentions, of migrating to this country, I can have no doubt of succeeding. But I have made no reply to these inquiries ; or, if any, in very general terms ; because I did not want to engage in correspondences of this sort with persons of whom I had no knowledge, nor indeed leisure for them, if I had been so disposed.

I shall now conclude as I began, with a desire, that if you see any impropriety in making these sentiments known to that class of people who might wish to avail themselves of the occasion, that it may not be mentioned. By a law, or by some regulation of your government artisans, I am well aware are laid under restraints ; and, for this reason, I have studiously avoided any overtures to mechanics, although my occasions called for them. But never having heard that difficulties were thrown in the way of husbandmen by the government, is one reason for my bringing this matter to your view. A second is, that having yourself expressed sentiments which shewed that you had cast an eye towards this country, and was not inattentive to the welfare of it, I was led to make my intentions known to you, that if you, or your friends, were disposed to avail yourselves of the knowledge, you might take prompt measures for the execution.—And, 3dly, I was sure, if you had lost sight of the object yourself, I could, nevertheless, rely upon such information as you might see fit to give me, and upon such characters, too, as you might be disposed to recommend.

Lengthy as this epistle is, I will crave your patience while I add, that, it is written in too much haste, and under too great a pressure of public business, at the commencement of an important Session of Congress, to be correct, or properly digested. But the season of the year, and the apprehension of ice, are hurrying away the last vessel bound from this port to London. I am driven therefore to the alternative of making the matter known in this hasty manner, and giving a rude sketch of the farms, which is the subject of it ; or to encounter delay—the first I preferred. It can hardly be necessary to add, that I have no desire that any formal promulgation of these sentiments should be made.

To accomplish my wishes, in the manner herein expressed, would be agreeable to me; and in a way that cannot be exceptionable, would be more so.

With much esteem and regard,  
I am, Sir, your most obedient servant,

G. WASHINGTON.

Arthur Young, Esq.

## FARMS, AND THEIR CONTENTS.

### UNION FARM.

Field, No. I.	-	-	-	-	120 acres.
II.	-	-	-	-	129
III.	-	-	-	-	121
IV.	-	-	-	-	120
V.	-	-	-	-	110
VI.	-	-	-	-	116
VII.	-	-	-	-	125
Meadow,	-	-	-	42	
				25	
				<hr/>	67
Clover lots,	-	-	-	-	20
				<hr/>	928

### DOGUE RUN FARM.

Field, No. I.	-	-	-	-	70 acres.
II.	-	-	-	-	74
III.	-	-	-	-	74
IV.	-	-	-	-	71
V.	-	-	-	-	75
VI.	-	-	-	-	73
VII.	-	-	-	-	80
Meadow,	-	-	-	-	38
					18
					12
					10
					36
				<hr/>	114
Clover lots,	-	-	-	-	18
				<hr/>	649



## MUDDY-HOLE FARM.

Field, No. I.	-	-	-	-	63	acres
II.	-	-	-	-	68	
III.	-	-	-	-	52	
IV.	-	-	-	-	54	
V.	-	-	-	-	65	
VI.	-	-	-	-	80	
VII.	-	-	-	-	74	
Clover lots,	-	-	-	-	20	
					—	476

## RIVER FARM.

Field, No. I.	-	-	-	-	120	acres.
II.	-	-	-	-	120	
III.	-	-	-	-	125	
IV.	-	-	-	-	132	
V.	-	-	-	-	132	
VI.	-	-	-	-	130	
VII.	-	-	-	-	120	
Pasture,	-	-	-	-	212	
Orchards, &c.	-	-	-	-	84	
Clover lots,	-	-	-	-	32	
					—	1207
Union farm,	-	-	-	-	928	
Dogue run farm,	-	-	-	-	649	
					—	
Total of the four farms,					-	3260
					—	

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*Philadelphia, October 20, 1792.*

Sir,

I HAVE received your letter of the 18th of May, enclosing the pamphlet and papers which you had the goodness to send me. While I beg your acceptance of my acknowledgments, for the polite mark of attention in transmitting these things to me, I flatter myself you will be assured, that I consider the subject therein recommended as highly important to society, whose best interests I hope will be promoted by a proper investigation of them, and the happiness of mankind advanced thereby.

I have to regret, that the duties of my public station do not allow me to pay that attention to Agriculture and the objects attached to it (which have ever been my favorite pursuit) that I could wish ; but I will put your queries respecting sheep into the hands of such gentlemen as I think most likely to attend to them, and answer them satisfactorily. I must, however, observe, that no important information on the subject can be expected from this country, where we have been so little in the habit of attending either to the breed or improvement of our stock.

With great respect and esteem,

I have the honor to be, Sir,

Your most obedient servant.

G. WASHINGTON.

*Sir John Sinclair.*

*Philadelphia, July 20, 1794.*

SIR,

I AM indebted to you for your several favors of the 15th of June, 15th of August, and 11th of September of the last—and for that of the 6th of February, in the present year ; for which, and the pamphlet accompanying them, my thanks are particularly due. To say this, and to have suffered them to remain so long unacknowledged, needs explanation. The truth is, they came to hand—the first of them about the opening, and the second set, towards the close of a long and interesting Session of Congress, during which my time was very much occupied, and at the end thereof, I had a pressing call to my estate in Virginia, from whence I have not been returned more than ten or twelve days.

I have read with peculiar pleasure and approbation, the work you patronise ; so much to your own honor and the utility of the public. Such a general view of the Agriculture in the several counties of Great Britain, is extremely interesting ; and cannot fail of being very beneficial to the Agricultural concern of your country and to those of every other wherein they are read, and must entitle you to their warmest thanks for having set such a plan on foot, and for prosecuting it with the zeal and intelligence you do.

I am so much pleased with the plan and execution my-

self, as to pray you to have the goodness to direct your bookseller to continue to forward them to me, accompanied with the cost which shall be paid to his order ; or remitted so soon as the amount is made known to me. When the whole are received, I will promote, as far as in me lays, the reprinting of them here.

I know of no pursuit in which more real and important services can be rendered to any country, than by improving its Agriculture—its breed of useful animals—and other branches of a husband-man's cares ;—nor can I conceive any plan more conducive to this end, than the one you have introduced for bringing to view the actual state of them, in all parts of the kingdom ; by which good and bad habits are exhibited in a manner too plain to be misconceived ; for the accounts given to the British board of Agriculture, appear in general, to be drawn up in a masterly manner, so as fully to answer the expectations formed in the excellent plan which produced them ; affording at the same time a fund of information useful in political economy—serviceable in all countries.

Commons, Tithes, Tenantry (of which we feel nothing in this country) are in the list of impediments I perceive, to perfection in English farming ; and taxes are heavy deductions from the profit thereof. Of these we have none, or so light as hardly to be felt. Your system of Agriculture, it must be confessed, is in a stile superior, and of course much more expensive than ours, but when the balance at the end of the year is struck, by deducting the taxes, poor rates, and incidental charges of every kind, from the produce of the land, in the two countries, no doubt can remain in which scale it is to be found.

It will be sometime I fear, before an agricultural Society with Congressional aids will be established in this country ; we must walk as other countries have done before we can run. Smaller Societies must prepare the way for greater, but with the lights before us, I hope we shall not be so slow in maturation as older nations have been. An attempt, as you will perceive by the enclosed outlines of a plan, is making to establish a State Society in Pennsylvania for Agricultural improvements. If it succeeds, it will be a step in the ladder, at present it is too much in embryo to decide on the result.

Our domestic animals, as well as our Agriculture, are

inferior to yours in point of size ; but this does not proceed from any defect in the stamina of them, but to deficient care in providing for their support ; experience having abundantly evinced that, where our pastures are as well improved as the soil and climate will admit ; where a competent store of wholesome provender is laid up, and proper care used in serving it, that our horses, black cattle sheep, &c. are not inferior to the best of their respective kinds which have been imported from England. Nor is the wool of our sheep inferior to that of the *common* sort with you : —as a proof, after the peace of Paris in 1783, and my return to the occupation of a farmer, I paid particular attention to my breed of sheep (of which I usually kept about seven or eight hundred.) By this attention, at the shearing of 1789, the fleeces yielded me the average quantity of 5 1-4lbs of wool ; a fleece of which promiscuously taken, I sent to Mr. ARTHUR YOUNG, who put it, for examination, into the hands of Manufacturers. These pronounced it to be equal in quality to the Kentish wool. In this same year, *i. e.* 1789, I was again called from home, and have not had it in my power since to pay any attention to my farm ; the consequence of which is, that my sheep, at the last shearing, yielded me not more than 2 1-2 lbs. This is not a single instance of the difference between care and neglect. Nor is the difference between good and bad management confined to that species of stock ; for we find that good pastures and proper attention, can, and does, fill our markets with beef of seven, eight and more hundred weight, the four quarters ; whereas from 450 to 500 (especially in the States south of this, where less attention hitherto has been paid to grass,) may be found about the average weight. In this market, some bullocks were killed in the months of March and April last, the weights of which, as taken from the accounts which were published at the time, you will find in a paper enclosed. These were pampered steers, but from 800 to a thousand, the four quarters, is no uncommon weight.

Your general history of sheep, with observations thereon, and the proper mode of managing them, will be an interesting work when compleated ; and with the information, and accuracy, I am persuaded it will be executed, under your auspices, must be extremely desirable. The

climate of this country, particularly that of the middle States, is congenial to this species of animal, but want of attention to them in most farmers, added to the obstacles which prevent the importation of a better kind, by men who would be at the expence, contributes not a little to the present inferiority we experience.

Mr. Edwards would have it as much in his power as most of our farmers, to solve the queries you propounded to him: in addition to which, a gentleman of my acquaintance (who is also among the best farmers of this country,) to whom I gave the perusal of your propositions, has favoured me with some ideas on the subject, as you will find on a paper, herewith enclosed.

The sample you were so obliging as to put into the hands of Mr. LEAR, for me, of a Scotch fabrick, is extremely elegant, and I pray you to accept my thanks for it, as I entreat you also to do for the civilities shewn to that gentleman, who has a grateful sense of them.

Both Mr. ADAMS, and Mr. JEFFERSON, had the perusal of the papers which accompanied your note of the 11th of September.

With great respect and esteem,

I have the honor to be, Sir,

Your obedient servant.

G. WASHINGTON.

*Philadelphia, 10th July, 1795.*

SIR,

I COULD not omit so favourable an opportunity, as the departure of Mr. STRICKLAND affords me, of presenting my best respects to you; and my sincere thanks for the views of Agriculture in the different counties of Great Britain, which you have had the goodness to send me; and for the diploma, (received by the hands of Mr. JAY) admitting me a foreign honorary member of the Board of Agriculture.

For this testimony of the attention of that body, and for the honor it has conferred on me, I have a high sense; in communicating of which to the board, I shall rely more upon your goodness than on any expression of mine to render it acceptable.

From the first intimation you were pleased to give me of this Institution, I conceived the most favourable ideas of its utility; and the more I have seen, and reflected on the plan since, the more convinced I am of its importance, in a national point of view, not only to your own country, but to all others which are not too much attached to old and bad habits to forsake them, and to new countries that are *just beginning* to form systems for the improvements of their husbandry.

Mr. STRICKLAND has not been idle since he came to this country. To him therefore, for a description of the climate—the soil—the agriculture, and the improvements generally; the modes of carrying them on—the produce of the land—the draught cattle—domestic animals—and the farming implements which are used by our people in the Eastern and middle States, through which he has passed, I shall refer you. Nothing, I believe, has escaped his observation that merited notice.

You will add to the obligations already conferred on me, by directing your Bookseller to supply me regularly with all such proceedings of the Board, as are intended for the public; and when they are in a fit state for it, that they may be neatly bound. To this request, I pray he may be desired to add the cost, which shall be paid at sight, to his order here, or remitted to him as may be most convenient and agreeable to himself.

*Note.*—The remainder of this letter, was merely a conclusion in the usual terms, and is wanting, having been cut off and given to a gentleman, who requested it, as a particular favour, “there being nothing, he declared, he wished for more, than to have in his possession a specimen of the handwriting, and above all the signature, of the illustrious WASHINGTON.”

LONDON, 10th Feb. 1800.

JOHN SINCLAIR.

*Philadelphia, 20th February, 1796.*

SIR,

WHEN I last had the honor of writing to you, I had hopes, though I must confess they were not of the most

sanguine sort, that I should have been enabled ere this, to have given you a more satisfactory account of the business you had been pleased to commit to me than will be conveyed in this letter.

Doubts having arisen, from peculiar calls on the Treasury of this country for money (occasioned by the expences of our wars with the Indians, the redemption of our captives at Algiers, obtaining peace with that regency and Morocco, together, with other demands in addition to the ordinary expenditures of government), that funds with difficulty would be provided to answer them, without imposing additional taxes; a measure wished to be avoided. I was constrained (after consulting one or two influential members of the legislature), from introducing your plan for a contribution: and, under these circumstances, I avoided communicating the "Extracts from the minutes of the proceedings of the Board of Agriculture, respecting Mr. ELKINGTON'S mode of draining," &c. except to one gentleman only, in whom I had entire confidence, and who I knew was always disposed to promote measures of utility. These being the grounds of my proceeding, I shall hope, although your expectations may be disappointed, you will receive the information as an evidence of my candour.

Agreeably to your desire, I have put the "Outlines of the 15th chapter of the proposed general report from the Board of Agriculture, on the subject of manures," into the hands of one of the most judicious farmers within my reach, and when his observations thereon are received, they shall be transmitted to you. I wish my own engagements would allow me time to attend, more than I do, to these agreeable and useful pursuits; but having been absent from what I consider my proper home (except on short occasional visits) for more than seven years; and having entered into my 65th year, a period which requires tranquillity and ease. I have come to a determination to lease the farms of my Mount Vernon estate, except the mansion-house farm, and a grazing one 3 miles off; which I shall retain in my own occupation for amusement, whilst life and health is dispensed to me. And as many farmers from your country have emigrated to this, and many more, according to their accounts, desirous of following, if they knew be-

forehand, where and on what terms they could fix themselves compactly in a healthy and populous country. I have taken the liberty to enclose you the copy of a notification which I have published in some of the Gazettes of the United States ; that in case any farmers answering the descriptions therein contained are about to transplant themselves, to whom you might be inclined to give the information, that you may have it in your power to do so. But let me entreat you, Sir, to believe, that I have no wish to its promulgation farther than I have declared, that I have no intention to *invite* emigrants, even if there are no restrictive acts against it—and even if there be, that I am opposed to it altogether.

As wheat is the staple produce of that part of the country in which this estate lies, I shall fix the rent therein, at a bushel and a half for every acre of arable land contained within the lease ; to be discharged, in case of failure of that crop, at the price the article bears in the market.

I have but little expectation that arrangements will be made by the time limited, for giving possession of the farms next year ; nor should I wish to do it with such unskilful farmers as ours, if there was a prospect of obtaining them from any other country, where husbandry was better understood, and more advantageously practised. It is time however, to conclude ; for I feel ashamed at having employed so much of it, in matters interesting to myself only ; and I shall do it with assurances as sincere as they are warm, of being, Sir,

Your most obedient and obliged servant,

G. WASHINGTON.

*Sir John Sinclair, Bart.*

*Philadelphia 12th June, 1796.*

SIR,

A LONG and interesting Session of Congress which did not close until the first day of this month, and the laws which required to be carried into execution promptly ; will, I am persuaded, be admitted as a reasonable excuse for my not writing to you since the 20th of February last, agreeably to assurances then given. But what appology can I offer, *now* that I am about to give you the result of the inquiries you requested me to make, when it will be found



to fall so far short of what you might have expected from the time which has been taken to render it.

Your wishes on this head I communicated to RICHARD PETERS, Esq. who is one of the most intelligent and best practical as well as theoretical farmers we have ; with a desire that he would advise with others, and condense their observations in a summary statement.

Why this was not done and why he could do no more you will find in his own original letter, with the questions and answers therein enclosed.

To Mr. PETERS's experience with respect to gypsum as a manure, let me add the following as an unequivocal evidence ; that it has no effect on stiff heavy land that does not absorb or permit the water on the surface occasioned by superabundant falls of rain or snow to penetrate quickly ; which is the case generally with the soil of my estate at Mount Vernon. The experiment and proof to which I alluded, were made eight or nine years ago ; at the rate of from one to twenty bushels of the Plaister of Paris to the acre, (among other things to ascertain the just quantum to be used). I spread it on grass grounds and on ploughed land ; on the latter, part of it was ploughed in ; part harrowed ; part scratched in with a light bush, while another part lay undisturbed on the surface ; all with oats in the spring. But it had no more effect in *any* instance *then*, or *since*, than so much of the earth it was spread over would have had, if it had been taken up and spread again.

I have the honor to be, Sir, &c.

*Sir John Sinclair.*

G. WASHINGTON.

*Philadelphia, 6th March, 1797.*

SIR,

ON the 11th of December, I wrote you a long letter ; and intended before the close of the last Session of Congress (which ended on the third instant, conformably to the Constitution) to have addressed you again, but oppressed as I was with the various occurrences incident thereto, especially in the latter part of it, it has not been in my power to do so during its continuance ; and now, the arrangements necessary to my departure from this city, for a more tranquil theatre, and for the indulgence of rural pursuits, will oblige me to suspend my purpose

until I am fixed at Mount Vernon, where I expect soon to be ; having resigned the chair of government to Mr. JOHN ADAMS, on Friday last ; the day on which I completed my second four years administration.

Under the circumstances here mentioned, I should not have troubled you, at this time, with so short a letter, but for the purpose of accompanying it with two or three pamphlets on the subject of Agriculture ; one of which treats more extensively on gypsum as a manure, than any I have seen before. The other two will only serve to shew, that essays of a similar kind are making in this infant country.

I am sorry to add, that nothing *final* in Congress, has been decided respecting the institution of a National Board of Agriculture, recommended by me, at the opening of the Session. But this did not, I believe, proceed from any disinclination to the measure, but from their limited sitting, and a pressure of what they conceived, more important business. I think it highly probable that *next* Session will bring this matter to maturity.

I have the honor to be, Sir, &c.

Sir John Sinclair.

G. WASHINGTON.

*Mount Vernon, 15th July, 1797.*

SIR,

SINCE my last to you, dated in Philadelphia the 6th of March, I have been honoured with your's and Lord HAWKE's joint favour of the 28th of March 1796, introductory of Doctor SCANDALLA ; who gave me the pleasure of his company in June last, and whom I found a very sensible, and well informed man.

I have also received your separate favours of the 21st. of February, and 29th of March, in the present year. The last accompanying your printed account of the origin of the Board of Agriculture and its progress for the three years after its establishment. For your kindness in forwarding of them, I pray you to accept my best thanks.

I will keep one copy of this work myself, and shall read it, I am sure with pleasure, so soon as I have passed through my harvest, which is now nearly finished ; the

other copies shall be put into such hands, as I conceive will turn them to the best account.

Your not having, in either of the letters acknowledged above, mentioned the receipt of two from me, dated the 10th and 11th of December 1796 ; the last a private and very long one, fills my mind with apprehension of a miscarriage, although I do not see how it should have happened, as they went with several other letters under cover to Mr. KING, (our Minister in London,) who in a letter to me, dated the 6th of February following, after giving information of what he had done with my other letters, adds " and as soon as Sir JOHN SINCLAIR returns to town, I will also deliver the letter addressed to him." Was it not for this information I should by this conveyance, have forwarded a duplicate.

The result of my enquiries of Members of Congress, attending the December Session, varied so little from the details I had the honour to give you concerning the prices of land, &c. in my private letter of the 11th of December, as to render a second edition unnecessary. The reduction however, in the price of our produce since last year, (flour having fallen from fifteen to seven or eight dollars a barrel, and other articles in that proportion), may occasion a fall in the price of lands : a stagnation it has already produced ; and I have been told, a reduction also, in some of the latter sales.

Our crop of wheat this year, from the best information I have been able to obtain ; will be found very short, owing to three causes ; an uncommon draught last autumn, a severe winter with but little snow to protect it, and which is still more to be regretted, to what with us is denominated the Hessian fly, which has spread devastation, more or less, in all quarters ; nor has the latter wheat escaped the rust. The grain however, except where the rust appeared before it was hard, is extremely fine. We are equally unlucky in our oats, occasioned by a severe draught since the month of April.—With sentiments of high esteem and regard,

I have the honor to be, Sir, &c.

*Sir John Sinclair.*

G. WASHINGTON.

*Mount Vernon, 6th November, 1797.*

SIR,

SINCE I had the honor of writing you on the 15th July, I have been favoured with your letter of the 13th of February, introductory of THOMAS MACDONALD, Esq. and your note of the 9th of June, by General KOSCIUSKO ; together with the surveys, and papers accompanying both. For your goodness in sending them, I pray you to accept my best thanks, and that I may not be a burthensome member of the Board, I enclose a small bill of exchange, to be deposited in the hands of your Bookseller, to defray the cost of the several copies of your works which may be forwarded to me. When this is expended, I will make another deposit for the same purpose.

As neither of the notes, the receipts of which is acknowledged above, nor any other has intimated in the most distant manner, that my letters of the 10th and 11th of December, (the latter a private one) had ever reached your hands. I now do, as well for the purpose of evincing that I was not inattentive to your request, as to give information which may yet (though late) be useful, forward a duplicate of the private letter, from a press copy taken at the time, and of my last also, of the 15th of July ; being more disposed to trouble you with a repetition of the sentiments then expressed, than to lay under the suspicion of inattention to your commands.

I can now, with more certainty than on the 15th of July, inform you that lands have fallen in price ; ascribable to two causes, the shocking depredations committed on our commerce (within the last six or eight months by the French), and the reduction in price of our produce.

Our crops of grain are, in places, tolerable, but upon the whole below mediocrity.

An eight years absence from home (except occasional short visits to it), has thrown all my building, and other matters of private concern, into so much disorder, that at no period of my life have I ever been more engaged, than in the last six or eight months, to repair and bring them into tune again : this has prevented me from looking into the Agricultural surveys of the counties of England and Scotland, with the attention I propose to do the ensuing winter. I shall certainly be very desirous of having a compleat set of them, and if any are missing will apply accordingly, as it is my intention to have them

classed, and bound neatly. With great pleasure, I received a visit from Mr. MACDONALD a few days ago, who fully answers the character given of him, as a polite and sensible man.

I have the honor to be, Sir, &c.

*Sir John Sinclair, Bart.*

G. WASHINGTON.

SINCE this work was sent to the press, I find that one of GENERAL WASHINGTON's most interesting letters has been lost. There is fortunately, however, an extract from it, in the First Volume of the Communications published by the Board of Agriculture (p. 374), a copy of which I beg leave to lay before the Reader, from that publication.

*Philadelphia, 10th December, 1796.*

“ THE result of the experiments entrusted to the care of Dr. FORDYCE, must be as curious as they may prove interesting to the science of husbandry. Not less so, will be an intelligent solution of those queries relative to live stock, which are handed to the public.

“ A few months more, say the 3d of March next (1797), and the scenes of my political life will close, and leave me in the shades of retirement; when if a few years are allowed me to enjoy it (many I cannot expect, being upon the verge of sixty-five), and health is continued to me, I shall peruse with pleasure and edification, the fruits of the exertions of the Board for the improvement of Agriculture; and shall have leisure, I trust, to realise some of the useful discoveries which have been made in the science of husbandry.

“ Until the above period shall have arrived, and particularly during the present Session of Congress, which commenced the 5th instant, I can give but little attention to matters out of the line of my immediate avocations. I did not, however, omit the occasion, at the opening of the Session, to call the attention of that body to the importance of Agriculture. What will be the result, I know not at present; but if it should be favourable, the hints which you will have it in your power to give, cannot fail of being gratefully received by the members who may constitute the Board.”

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## CONCLUSION.

### ON THE CHARACTER OF GENERAL WASHINGTON.

WHOEVER has perused the preceding Letters, will, I trust, concur with me\* in the following reflections.

1. That nothing could possibly place the character of this distinguished statesman in a more estimable light, than that of beholding the same individual, whose military exploits had spread his fame over the universe, and who had been invested with supreme power in the country where he was born ; in the midst of all his various public avocations, carrying on an extensive correspondence, with the native of a distant country, on Agricultural and other general inquiries of a similar nature.

2. That those who are blessed with a reflecting and philosophic mind, must contemplate with pleasure and delight, a person elevated by the voice of his fellow-citizens, to the summit of political authority ; who, instead of wishing to aggrandize himself, and to extend his power, was anxiously bent to quit that situation, to which so many others would have fondly aspired, and to return to the comfort and enjoyment of private life : belying thus the insinuations of those malignant spirits, who are perpetually railing against the talents and virtues which, conscious of wanting themselves, they do not believe that others can possess.

3. Is there, on the whole, any individual, either in ancient or modern history, who has prouder claims to distinction and pre-eminence, than the great character whose letters this volume contains ? His military talents were early celebrated ; first in the service of Great Britain, and afterwards in that of America. His powers as a statesman, and as the founder of a constitution, which with British prejudices, I may consider as inferior to our own, but which promises to secure the happiness of the great nation it was formed to govern, cannot possibly be questioned. His public virtue, as the uncorrupted magistrate of a free people, who reluctantly received supreme authority, when

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\* *Sir John Sinclair.*

it was judged necessary for the public good for him to assume it, and who anxiously wished to resign it into their hands when it could be done with public safety, can hardly be equalled in history. His literary endowments were unquestionably of a superior order: his letters in this collection, his addresses to the American Congress, and his farewell oration, when he quitted, for the last time, the Presidency of the United States, are models of each species of composition. His closing a well-spent life, after a short illness, without having his strength or faculties impaired by any previous disorder, or any untoward circumstance having occurred, that could materially affect his feelings, or could possibly tarnish his fame, is an uncommon instance of good fortune. The scene in which he acted also, and the object which he achieved, are the most memorable which history furnishes. For it was such a man alone, who by combining the force, and commanding the confidence, of thirteen separate states, could have dissolved those ties which subjected America to Europe, and to whom the political separation of two worlds is to be attributed. But, above all, what distinguished this celebrated warrior and statesman is, that to all those military and public talents, and to those literary endowments, which are so rarely united in the same person, he added the practice of every virtue that could adorn the private individual. It were in vain for me, to attempt adequately to express, the ideas I entertain of a character, in every respect so peculiarly splendid. The pen of the immortal Shakspeare, is alone competent to the task, and on the tombstone of the illustrious WASHINGTON let it be engraved,—

His life was gentle, and the elements  
So mixed in him, that Nature might stand up  
And say to all the world,—*This was a man,*  
—————*take him for all in all,*  
*We shall not look upon his like again.\**

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\* Julius Cesar, Act V. Scene 5—and Hamlet, Act I. Scene 2.

F I N I S.

